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NEW ZEALAND OFFICIAL YEAR-BOOK, 1901.

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THE

NEW ZEALAND

OFFICIAL YEAR-BOOK

1901

(TENTH YEAR OF ISSUE.)

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PREPARED UNDER INSTRUCTIONS FROM THE

RIGHT HONOURABLE R. J. SEDDON, P.C.,

PREMIER.

BY

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REGISTRAR-GENERAL.

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PREFACE.

THE tenth issue of the New Zealand Official Year-book is now presented.

So far from any abatement of interest in the work being manifested, there has been hitherto a growing requirement for it, not only in the colony but also abroad. The number of copies printed has been considerably increased this year to meet the demand.

E. J. VON DADELSZEN.

Registrar-General's Office,
Wellington, N.Z., 7th October, 1901.

CONTENTS.

PART I.—INTRODUCTORY: OFFICIAL.

	Page
New Zealand	1
Successive Governors	17
Supreme Court Judges, Past and Present	19
Executive Councils, 1843–56	20
Parliaments	21
Successive Ministries	22
Premiers	23
Speakers of the Legislative Council	23
Speakers of the House of Representatives	24
Foreign Consuls	24
Agent-General in London	25
The Colonial Office	26
Crown Agents for the Colonies	26
Honours held by Colonists	26
Governor of New Zealand	27
Executive Council, June, 1901	28
The General Assembly	29
Official List	34
Ecclesiastical	50
Defences, Military and Naval	52
Depots for Shipwrecked Mariners.	56
Graving Docks and Patent Slips	56
Harbours, Pilotage, Port Charges, &c.	61
Lighthouses	69
Annual Pensions	71
"The Civil Service Insurance Act, 1893"	73
New Zealand Newspapers	75
The Customs Tariff of New Zealand	82
Fees payable under Land Transfer Act	97
Duties on Estates of Deceased Persons	99

PART II.—STATISTICAL.

Section	I. Imports: Customs and Excise Revenue	100
"	II. Exports, and Total Trade	126
"	III. Manufactories and Works	153
"	IV. Law and Crime	153
"	V. Education	169
"	VI. Local Governing Bodies	189
"	VII. Licenses and Licensed Houses, &c.	216
"	VIII. Accumulation: Prices and Wages	222
"	IX. Transport and Communication	250
"	X. Meteorology	258
"	XI. Occupation of Land; and Live Stock	262
"	XII. Vital Statistics	276
"	XIII. Representation, and the General Election of 1899	319
"	XIV. Agriculture	329
"	XV. Mining	343
"	XVI. Government Valuation of Land and its improvements	353
"	XVII. Population	359
"	XVIII. The Maoris	380

	Page
Section XIX. Finance—	
Subsection A.—Revenue and Expenditure of the General Government	384
„ B.—Taxation	397
„ C.—Public Debt	401
Supplementary: The Assets Realisation Board ..	414
„ XX. Crown Lands	416
„ XXI. Land for Settlements	422
Miscellaneous Statistics	426

PART III.—ARTICLES ON SPECIAL SUBJECTS.

Section I.—	
The Land System of New Zealand	431
Advances to Settlers	444
The Land-tax and Income-tax	452
The Government Valuation of Land Act	457
Rating on unimproved Value of Land	457
"The Municipal Franchise Reform Act, 1898"	460
Old-age Pensions	460
New Zealand Consols	466
New Zealand Government Life Insurance Department	469
Section II.—	
Agriculture in New Zealand	472
Section III.—	
Rotorua District	503
Te Aroha	509
Hanmer Springs	512
The Marlborough Sounds	517
The Otago Lakes	523
The Sydney Pageant	527
Maori Religion, Proverbs, &c.	530

PART IV.—DESCRIPTION OF LAND DISTRICTS.

Auckland Land District	534
Taranaki Land District	542
Hawke's Bay Land District	550
Wellington Land District	555
Marlborough Land District	569
Nelson Land District	569
Westland Land District	574
Canterbury Land District	578
Otago Land District	588
Southland Land District	598

APPENDIX.

Dates of certain Principal Events in the History of New Zealand ..	602
General Index	615
Synopsis of Statistics, showing Progress of Colony, 1840–1900 (two tables)	*Broadsheet.*

MAP, DIAGRAMS, AND ILLUSTRATIONS.

THE

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ERRATUM.

On page 362—Centesimal Increase of Population, 1858 to 1861—for 39·99 *read.* 66·67.

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NEW ZEALAND OFFICIAL YEAR-BOOK, 1901.

PART I.—INTRODUCTORY: OFFICIAL.

NEW ZEALAND.

THE Colony of New Zealand consists of three main islands, with several groups of smaller islands lying at some distance from the principal group. The main islands, known as the North, the Middle, and Stewart Islands, have a coast-line 4,330 miles in length—North Island, 2,200 miles; Middle Island, 2,000 miles; and Stewart Island, 130 miles. Other islands included within the colony are the Chatham, Auckland, Campbell, Antipodes, Bounty, and Kermadec Islands. The annexation of the Cook or Hervey Group and sundry other islands has recently necessitated an enlargement of the boundaries of the colony, which will be specially treated of further on.

New Zealand is mountainous in many parts, but has, nevertheless, large plains in both North and Middle Islands. In the North Island, which is highly volcanic, is situated the famous Thermal-Springs District, of which a special account will be given. The Middle Island is remarkable for its lofty mountains, with their magnificent glaciers, and for the deep sounds or fiords on the western coast.

New Zealand is firstly a pastoral, and secondly an agricultural country. Sown grasses are grown almost everywhere, the extent of land laid down being more than eleven millions of acres. The soil is admirably adapted for receiving these grasses, and, after the bush has been burnt off, is mostly sown over without previous ploughing. In the Middle Island a large area is covered with native grasses, all used for grazing purposes. The large extent of good grazing-land has made the colony a great wool and meat-producing country; and its agricultural capabilities are, speaking generally, very considerable. The abundance of water and the quantity of valuable timber are other natural advantages.

New Zealand is, besides, a mining country. Large deposits of coal are met with, chiefly on the west coast of the Middle Island. Gold, alluvial and in quartz, is found in both islands, the yield having been nearly fifty-eight millions sterling in value to the present time. Full statistical information on this subject is given further on, compiled up to the latest dates.

Discovery and Early Settlement.

The first authentic account of the discovery of New Zealand is that given by Abel Jansen Tasman, the Dutch navigator. He left Batavia on the 14th August, 1642, in the yacht "Heemskirk," accompanied by the "Zeehaen" (or "Sea-hen") fly-boat. After having visited Mauritius, and discovered Tasmania, named by him "Van Diemen's Land," in honour of Anthony van Diemen, Governor of the Dutch possessions in the East Indies, he steered eastward, and on the 13th December of the same year sighted the west coast of the Middle Island of New Zealand, described by him as "a high mountainous country, which is at present marked in the charts as New Zealand."

Tasman, under the belief that the land he saw belonged to a great polar continent, and was part of the country discovered some years before by Schouten and Le Maire, to which the name of Staaten Land had been given, gave the same name of Staaten Land to New Zealand; but within about three months afterwards Schouten's "Staaten Land" was found to be merely an inconsiderable island. Upon this discovery being announced, the country that Tasman had called Staaten Land received again the name of "New Zealand," by which it has ever since been known. Tasman sailed along the coast to a bay, where he anchored. To this he gave the name of Murderers (now Massacre) Bay, on account of an unprovoked attack on a boat's crew by the natives, and the massacre of four white men. Thence he steered along the west coast of the North Island, and gave the name of Cape Maria van Diemen to the north-western extremity thereof. After sighting the islands of the Three Kings he finally departed, not having set foot in the country.

There is no record of any visit to New Zealand after Tasman's departure until the time of Captain Cook, who, after leaving the Society Islands, sailed in search of a southern continent then believed to exist. He sighted land on the 6th October, 1769, at Young Nick's Head, and on the 8th of that month cast anchor in Poverty Bay. After having coasted round the North Island and the Middle and Stewart Islands—which last he mistook for part of the Middle Island—he took his departure from Cape Farewell on the 31st March, 1770, for Australia. He visited New Zealand again in 1773, in 1774, and in 1777.

M. de Surville, a French officer in command of the vessel "Saint Jean Baptiste," while on a voyage of discovery, sighted the north-east coast of New Zealand on the 12th December, 1769, and re-

mained for a short time. A visit was soon after paid by another French officer, M. Marion du Fresne, who arrived on the west coast of the North Island of New Zealand on the 24th March, 1772, but was, on the 12th June following, treacherously murdered at the Bay of Islands by the Natives.

In 1793 the "Dædalus," under the command of Lieutenant Hanson, was sent by the Government of New South Wales to New Zealand, and two chiefs were taken thence to Norfolk Island. There was after this an occasional intercourse between the islands of New Zealand and the English settlements in New South Wales.

In 1814 the first missionaries arrived in New Zealand—Messrs. Hall and Kendall—who had been sent as forerunners by Mr. Marsden, chaplain to the New South Wales Government. After a short stay they returned to New South Wales, and on the 19th November of that year again embarked in company with Mr. Marsden, who preached his first sermon in New Zealand on Christmas Day, 1814. He returned to Sydney on the 23rd March, 1815, leaving Messrs. Hall and Kendall, who formed the first mission station at Rangihoua, Bay of Islands, under the auspices of the Church Missionary Society. Six years later, in 1821, the work of evangelization was put on a more durable basis; but the first station of the Wesleyan mission, established by Mr. Leigh and his wife, at the valley of the Kaeo, Whangaroa, was not taken possession of until the 10th June, 1823.

Colonisation.

The first attempt at colonisation was made in 1825 by a company formed in London. An expedition was sent out under the command of Captain Herd, who bought two islands in the Hauraki Gulf and a strip of land at Hokianga. The attempt, however, was a failure, owing to the savage character of the inhabitants. In consequence of frequent visits of whaling-vessels to the Bay of Islands, a settlement grew up at Kororareka—now called Russell—and in 1833 Mr. Busby was appointed British Resident there. A number of Europeans—generally men of low character—gradually settled in different parts of the country, and married Native women.

In 1838 a colonisation company, known as the New Zealand Company, was formed to establish settlement on systematic principles. A preliminary expedition, under the command of Colonel William Wakefield, was despatched from England on the 12th May, 1839, and arrived in New Zealand in the following August. Having purchased land from the Natives, Colonel Wakefield selected the shore of Port Nicholson, in Cook Strait, as the site of the first settlement. On the 22nd January, 1840, the first body of immigrants arrived, and founded the town of Wellington. About the same time—namely, on the 29th January, 1840—Captain Hobson, R.N., arrived at the Bay of Islands, empowered, with the consent of the

Natives, to proclaim the sovereignty of Queen Victoria over the islands of New Zealand, and to assume the government thereof. A compact called "The Treaty of Waitangi," to which in less than six months five hundred and twelve names were affixed, was entered into, whereby all rights and powers of sovereignty were ceded to the Queen, all territorial rights being secured to the chiefs and their tribes. New Zealand was then constituted a dependency of the Colony of New South Wales, but on the 3rd May, 1841, was proclaimed a separate colony. The seat of Government had been previously established at Waitemata (Auckland), round which a settlement was formed.

The New Zealand Company having decided to form another settlement, to which the name of "Nelson" was to be given, despatched a preliminary expedition from England in April, 1841, for the purpose of selecting a site. The spot chosen was the head of Blind Bay, where a settlement was established. About the same time a number of pioneers arrived in Taranaki, despatched thither by the New Plymouth Company, a colonising society, which had been formed in England, and had bought 50,000 acres of land from the New Zealand Company.

The next important event in the progress of colonisation was the arrival at Port Chalmers, on the 23rd March, 1848, of the first of two emigrant ships sent out by the Otago Association for the foundation of a settlement by persons belonging to or in sympathy with the Free Church of Scotland.

In 1849 the "Canterbury Association for founding a Settlement in New Zealand" was incorporated. On the 16th December, 1850, the first emigrant ship despatched by the association arrived at Port Cooper, and the work of opening up the adjoining country was set about in a systematic fashion, the intention of the promoters being to establish a settlement complete in itself, and composed entirely of members of the then United Church of England and Ireland.

The Maoris.

Prior to the colonisation of New Zealand by Europeans, the earliest navigators and explorers found a race of people already inhabiting both islands. Papers written in 1874 by Mr. (afterwards Sir) William Fox, and Sir Donald McLean, then Native Minister, state that at what time the discovery of these islands was made by the Maoris, or from what place they came, are matters of tradition only, and that much has been lost in the obscurity enveloping the history of a people without letters. Nor is there anything on record respecting the origin of the Maori people themselves, beyond the general tradition of the Polynesian race, which seems to show a series of successive migrations from west to east, probably by way of Malaysia to the Pacific. Little more can now be gathered from their traditions than that they were immigrants, and that they probably found inhabitants on the east coast of the North Island belonging to the same race as themselves—the descend-

ants of a prior migration, whose history is lost. The tradition runs that, generations ago, the Maoris dwelt in a country named Hawaiki, and that one of their chiefs, after a long voyage, reached the northern island of New Zealand. Returning to his home with a flattering description of the country he had discovered, this chief, it is said, persuaded a number of his kinsfolk and friends, who were much harassed by war, to set out with a fleet of double canoes for the new land. The names of most of the canoes are still remembered, and each tribe agrees in its account of the doings of the people of the principal canoes after their arrival in New Zealand; and from these traditional accounts the descent of the numerous tribes has been traced. Calculations, based on the genealogical staves kept by the *tohungas*, or priests, and on the well-authenticated traditions of the people, indicate that about twenty-one generations have passed since the migration, which may therefore be assumed to have taken place about five hundred and twenty-five years ago. The position of the legendary Hawaiki is unknown, but many places in the South Seas have been thus named in memory of the motherland. The Maoris speak a very pure dialect of the Polynesian language, the common tongue, with more or less variation, in all the Eastern Pacific Islands. When Captain Cook first visited New Zealand he availed himself of the services of a native from Tahiti, whose speech was easily understood by the Maoris. In this way much information respecting the early history of the country and its inhabitants was obtained which could not have otherwise been had.

For results of recent researches as to probable origin and present numbers of the Maoris, see Part II., *post*.

Boundaries and Area.

The Proclamation of Captain Hobson on the 30th January, 1840, gave as the boundaries of the colony the following degrees of latitude and longitude: On the north, 34° 30′ S. lat.; on the south, 47° 10′ S. lat.; on the east, 179° 0′ E. long.; on the west, 166° 5′ E. long. These limits excluded small portions of the extreme north of the North Island and of the extreme south of Stewart Island.

In April, 1842, by Royal Letters Patent, and again by the Imperial Act 26 and 27 Vict., c. 23 (1863), the boundaries of the colony were altered so as to extend from 33° to 53° of south latitude and from 162° of east longitude to 173° of west longitude. By Proclamation bearing date the 21st July, 1887, the Kermadec Islands, lying between the 29th and 32nd degrees of south latitude and the 177th and 180th degrees of west longitude, were declared to be annexed to and to become part of the Colony of New Zealand.

The following now constitute the Colony of New Zealand:—

1. The island commonly known as the North Island, with its adjacent islets, having an aggregate area of 44,468 square miles, or 28,459,520 acres.

2. The island known as the Middle Island, with adjacent islets, having an aggregate area of 58,525 square miles, or 37,456,000 acres.

3. Stewart Island, and adjacent islets, having an area of 665 square miles, or 425,390 acres.

4. The Chatham Islands, situate 536 miles eastward of Lyttelton in the Middle Island, with an area of 375 square miles, or 239,920 acres.

5. The Auckland Islands, about 200 miles south of Stewart Island, extending about 30 miles from north to south, and nearly 15 from east to west, the area being 210,650 acres.

6. The Campbell Islands, in latitude 52° 33′ south, and longitude 169° 8′ west, about 30 miles in circumference, with an area of 45,440 acres.

7. The Antipodes Islands, about 458 miles in a south-easterly direction from Port Chalmers, in the Middle Island. These are detached rocky islands, and extend over a distance of between 4 and 5 miles from north to south. Area, 12,960 acres.

8. The Bounty Islands, a small group of islets, thirteen in number, lying north of the Antipodes Islands, and about 415 miles in an east-south-easterly direction from Port Chalmers. Area, 3,300 acres.

9. The Kermadec Islands, a group lying about 614 miles to the north-east of Russell, in the Bay of Islands. Raoul or Sunday Island, the largest of these, is about 20 miles in circuit. The next in size is Macaulay Island, about 3 miles round. Area of the group, 8,208 acres.

The total area of the colony is thus about 104,471 square miles, of which the aggregate area of the outlying groups of islands that are practically useless for settlement amounts to about 438 square miles.

A protectorate is exercised by the Imperial Government over the Cook Islands (or Hervey Group) by Proclamation dated the 27th October, 1888. The British Resident* is appointed on the recommendation of the New Zealand Government. He acts as Government Agent for the colony in all matters of trade.

Area of the Australian Colonies.

The areas of the several Australian Colonies, as given by different authorities, vary considerably. The total area of the Australian Continent is given as 2,944,628 square miles, according to a computation made by the late Surveyor-General of Victoria, Mr. J. A. Skene, from a map of Continental Australia compiled and engraved under his direction; but the following areas are taken from the latest official records of each colony:—

---

* Lieut.-Colonel Walter Edward Gudgeon, C.M.G., is now British Resident at Rarotonga. His salary is paid by this colony. He succeeded Mr. Frederick J. Moss, who was the first Resident appointed.

BOUNDARIES EXTENDED.

THE boundaries of the Colony of New Zealand have been further extended as from the 11th June, 1901. The Proclamation fixing the date runs as follows:—

Whereas by Order in Council dated the thirteenth day of May, one thousand nine hundred and one, and made under "The Colonial Boundaries Act, 1895," it has been ordered by His Majesty the King that on and after a date to be appointed by the Governor of the Colony of New Zealand, by Proclamation under his hand and the Public Seal of the Colony, the boundaries of the Colony of New Zealand should be extended so as to include the islands of the Cook Group and all other the islands and territories then or thereafter forming part of His Majesty's dominions situate within the boundary-lines therein mentioned, being the boundary-lines specified in the Schedule hereto:

And whereas the aforesaid extension of boundaries has been consented to by resolution of both Houses of the General Assembly of the colony:

Now, therefore, in exercise of the powers conferred upon me by the said Order in Council, and of all other powers and authorities enabling me in this behalf, and in the presence of His Royal Highness the Duke of Cornwall and York, who in token thereof hath been graciously pleased to sign his name hereto, I, Uchter John Mark, Earl of Ranfurly, the Governor of the Colony of New Zealand, do hereby proclaim and appoint the eleventh day of June, one thousand nine hundred and one, to be the date on and after which the boundaries of the colony shall be and be deemed to be extended as specified in the said Order in Council.

SCHEDULE.

BOUNDARY-LINES.

A line commencing at a point at the intersection of the twenty-third degree of south latitude and the one-hundred-and-fifty-sixth degree of longitude west of Greenwich, and proceeding due north to the point of intersection of the eighth degree of south latitude and the one-hundred-and-fifty-sixth degree of longitude west of Greenwich; thence due west to the point of intersection of the eighth degree of south latitude and the one-hundred-and-sixty-seventh degree of longitude west of Greenwich; thence due south to the point of intersection of the seventeenth degree of south latitude and the one-hundred-and-sixty-seventh degree of longitude west of Greenwich; thence due west to the point of intersection of the seventeenth degree of south latitude and the one-hundred-and-seventieth degree of longitude west of Greenwich; thence due south to the point of intersection of the twenty-third degree of south latitude and the one-hundred-and-seventieth degree of longitude west of Greenwich; and thence due east to the point of intersection of the twenty-third degree of south latitude and the one-hundred-and-fifty-sixth degree of longitude west of Greenwich.

The Order in Council referred to in the foregoing Proclamation is to the following effect:—

Whereas by "The Colonial Boundaries Act, 1895," it is provided that where the boundaries of a colony have, either before or after the passing of that Act, been altered by Order in Council or Letters Patent, the boundaries as so altered

shall be and be deemed to have been from the date of the alteration the boundaries of the colony: Provided that the consent of a self-governing colony shall be required for the alteration of the boundaries thereof:

And whereas it is expedient that the boundaries of the self-governing Colony of New Zealand should be altered in such manner that the islands of the Cook Group, and such other islands in the Pacific within the limits hereinafter described as may now or hereafter form part of His Majesty's dominions, shall become part of the said Colony of New Zealand:

And whereas the said Colony of New Zealand has, by resolutions of both Houses of its Legislature, consented to the alteration of the boundaries of the colony as hereinafter described:

Now, therefore, His Majesty, by virtue and in exercise of the powers by "The Colonial Boundaries Act, 1895," or otherwise in His Majesty vested, is pleased, by and with the advice of His Privy Council, to order, and it is hereby ordered, as follows: From and after a date to be appointed by the Governor of the Colony of New Zealand by Proclamation under his hand and the Public Seal of the Colony, the boundaries of the Colony of New Zealand, as defined in an Act of the twenty-sixth year of the reign of Her late Majesty Queen Victoria, intituled "An Act to alter the Boundaries of New Zealand," shall be extended so as to include all the islands and territories which now or may hereafter form part of His Majesty's dominions situate within the following boundary-line, namely:

[*Here follow descriptions as in Schedule to Proclamation.*]

The islands referred to in the resolutions passed by the New Zealand Legislature are:—

The Cook Group, including: Rarotonga, Mangaia, Atiu, Aitutaki, Mitiaro, Mauke, Hervey (Manuai). Also, Palmerston (Avarua), Savage (Niue), Pukapuka (Danger), Rakaanga, Manahiki, Penrhyn (Tongareva), and Suwarrow.

A full descriptive account of the Cook Islands was published in the Year-book, 1895, pp. 456–65.

	Square Miles.
Queensland	668,497
New South Wales	310,700
Victoria	87,884
South Australia	903,690
Western Australia	975,920
Total Continent of Australia	2,946,691
Tasmania	26,215
New Zealand (including the Chatham and other islands)	104,471
Total Australasia	3,077,377

The size of these colonies may be better realised by comparison of their areas with those of European countries. The areas of the following countries — Austria-Hungary, Germany, France, Belgium, Holland, Denmark, Sweden and Norway, Portugal, Spain, Italy (including Sardinia and Sicily), Switzerland, Greece, Roumania, Bulgaria, Servia, Eastern Roumelia, and Turkey in Europe—containing on the whole rather less than 1,600,000 square miles, amount to little more than half the extent of the Australian Continent. If the area of Russia in Europe be added to those of the other countries the total would be about one-seventh larger than the Australian Continent, and about one-twelfth larger than the Australasian Colonies, including New Zealand.

Area of the Colony of New Zealand.

The area of the Colony of New Zealand is about one-seventh less than the area of Great Britain and Ireland, the Middle Island of New Zealand being a little larger than the combined areas of England and Wales.

United Kingdom.	Area in Square Miles.
England and Wales	58,311
Scotland	30,463
Ireland	32,531
Total	121,305

New Zealand.	Area in Square Miles.
North Island	44,468
Middle Island	58,525
Stewart Island	665
Chatham Islands	375
Other islands	438
Total	104,471

Physical Features of the North Island.

The North Island extends over a little more than seven degrees of latitude—a distance in a direct line from north to south of 430 geographical or 498 statute miles; but, as the northern portion of the colony, which covers more than three degrees of latitude, trends to the westward, the distance in a straight line from the

North Cape to Cape Palliser, the extreme northerly and southerly points of the island, is about 515 statute miles.

This island is, as a whole, hilly, and, in parts, mountainous in character, but there are large areas of plain or comparatively level country that are, or by clearing may be made, available for agricultural purposes. Of these, the principal are the plains in Hawke's Bay on the East Coast, the Wairarapa Plain in the Wellington District, and a strip of country along the West Coast, about 250 miles in length, extending from a point about thirty miles from the City of Wellington to a little north of New Plymouth. The largest plain in the North Island, Kaingaroa, extends from the shore of Lake Taupo in a north-north-easterly direction to the sea-coast in the Bay of Plenty; but a great part of it is covered with pumice-sand, and is unfitted for tillage or pasture. There are several smaller plains and numerous valleys suitable for agriculture. The level or undulating country in this island fit, or capable of being made fit, for agriculture has been roughly estimated at 13,000,000 acres. This includes lands now covered with standing forest, and swamps that can be drained; also large areas of clay-marl and pumice-covered land. The clay-marl in its natural state is cold and uninviting to the farmer, but under proper drainage and cultivation it can be brought to a high state of productiveness. This kind of land is generally neglected at the present time, as settlers prefer soils more rapidly remunerative and less costly to work. The larger portion of the North Island was originally covered with forest. Although the area of bush-land is still very great, yet year by year the amount is being reduced, chiefly to meet the requirements of settlement, the trees being cut down and burnt, and grass-seed sown on the ashes to create pasture. Hilly as the country is, yet from the nature of the climate it is especially suited for the growth of English grasses, which will flourish wherever there is any soil, however steep the land may be; once laid down in grass very little of the land is too poor to supply food for cattle and sheep. The area of land in the North Island deemed purely pastoral or capable of being made so, while too steep for agricultural purposes, is estimated at 14,200,000 acres. In the centre of the island is a lake, about twenty miles across either way, called Taupo. A large area adjacent to the lake is at present worthless pumice-country. The Waikato River, the largest in the North Island, flows out of the north-eastern corner of this lake, and runs thence north-westward until it enters the ocean a little distance south of the Manukau Harbour. This river is navigable for small steamers for about a hundred miles from its mouth. The Maori King-country, occupied by Natives who for several years isolated themselves from Europeans, lies between Lake Taupo and the western coast. The River Thames, or Waihou, having its sources north of Lake Taupo, flows northward into the Firth of Thames. It is navigable for about fifty miles, but only for small steamers. The other navigable rivers in this island are the Wairoa (Kaipara),

the Wanganui, and the Manawatu, the two last of which flow towards the south-west into Cook Strait.

The mountains in the North Island are estimated to occupy about one-tenth of the surface, and do not exceed 4,000ft. in height, with the exception of a few volcanic mountains that are more lofty. Of these, the three following are the most important:—

1. The Tongariro Mountain, situated to the southward of Lake Taupo. It consists of a group of distinct volcanic cones, the lava-streams from which have so overlapped in their descent as to form one compact mountain-mass at the base. The highest of these cones is called Ngauruhoe, and attains an elevation of 7,515ft. The craters of Ngauruhoe, the Red Crater (6,140ft.), and Te Mari (4,990ft.) are the three vents from which the latest discharges of lava have taken place, the most recent having occurred in 1868. These craters are still active, steam and vapour issuing from them with considerable force and noise, the vapours, charged with pungent gases and acids, making it dangerous to approach too near the crater-lips.

2. Ruapehu. This mountain lies to the south of Ngauruhoe and Tongariro. It is a volcanic cone in the solfatara stage, and reaches the height of 9,008ft., being in part considerably above the line of perpetual snow. The most remarkable feature of this mountain is the crater-lake on its summit, which is subject to slight and intermittent eruptions, giving rise to vast quantities of steam. Recently —in March, 1895—such an eruption took place, forming a few hot springs on the margin of the lake, and increasing the heat in the lake itself. This lake lies at the bottom of a funnel-shaped crater, the steep sides of which are mantled with ice and snow. The water occupies a circular basin about 500ft. in diameter, some 300ft. below the enclosing peaks, and is quite inaccessible except by the use of ropes. This lake, and the three craters previously mentioned on Tongariro, are all in one straight line, which, if produced, would pass through the boiling springs at Tokaanu on the southern margin of Lake Taupo, the volcanic country north-east of that lake, and White Island, an active volcano in the Bay of Plenty, situated about twenty-seven miles from the mainland.

3. Mount Egmont. This is an extinct volcanic cone, rising to a height of 8,260ft. The upper part is always covered with snow. This mountain is situated close to New Plymouth, and is surrounded by one of the most fertile districts in New Zealand. Rising from the plains in solitary grandeur, it is an object of extreme beauty, the cone being one of the most perfect in the world.

It is estimated that the area of mountain-tops and barren country at too high an altitude for sheep, and therefore worthless for pastoral purposes, amounts, in the North Island, to 300,000 acres.

Without a doubt the hot springs form the most remarkable feature of the North Island. They are found over a large area, extending from Tongariro, south of Lake Taupo, to Ohaeawai, in the extreme north—a distance of some 300 miles; but the principal seat

of hydrothermal action appears to be in the neighbourhood of Lake Rotorua, about forty miles north-north-east from Lake Taupo. By the destruction of the famed Pink and White Terraces and of Lake Rotomahana during the eruption of Mount Tarawera on the 10th June, 1886, the neighbourhood has been deprived of attractions unique in character and of unrivalled beauty; but the natural features of the country—the numerous lakes, geysers, and hot springs, some of which possess remarkable curative properties in certain complaints—are still very attractive to tourists and invalids. The world-wide importance of conserving this region as a sanatorium for all time has been recognised by the Government, and it is now dedicated by Act of Parliament to that purpose.

Notwithstanding the length of coast-line, good harbours in the North Island are not numerous. Those on the west coast north of New Plymouth are bar-harbours, unsuitable for large vessels. The principal harbours are the Waitemata Harbour, on which Auckland is situated—this is rather a deep estuary than a harbour; several excellent havens in the northern peninsula; and Port Nicholson, on the borders of which Wellington is situated. This is a land-locked harbour, about six miles across, having a comparatively narrow but deep entrance from the ocean. The water is deep nearly throughout.

The Cape Colville Peninsula is rich in gold-bearing quartz.

Cook Strait.

Cook Strait separates the North and Middle Islands. It is some sixteen miles across at its narrowest part, but in the widest about ninety. The strait is invaluable for the purpose of traffic between different parts of the colony.

Physical Features of the Middle Island.

The extreme length of the Middle Island, from Jackson's Head, in Cook Strait, to Puysegur Point, at the extreme south-west, is about 525 statute miles; the greatest distance across at any point is in Otago (the southernmost) District, about 180 miles.

The Middle Island is intersected along almost its entire length by a range of mountains known as the Southern Alps. Some of the summits reach a height of from 10,000ft. to 12,000ft., Mount Cook, the highest peak, rising to 12,349ft.

In the south, in the neighbourhood of the sounds and Lake Te Anau, there are many magnificent peaks, which, though not of great height, are, owing to their latitude, nearly all crowned with perpetual ice and snow. Further north the mountains increase in height—Mount Earnslaw, at Lake Wakatipu; and Mount Aspiring, which has been aptly termed the New Zealand Matterhorn, 9,949 ft. in height, at Lake Wanaka. Northward of this again are Mount Cook (or Aorangi), Mount Sefton, and other magnificent peaks.

For beauty and grandeur of scenery the Southern Alps of New Zealand may worthily compare with, while in point of variety they are

said actually to surpass, the Alps of Switzerland. In New Zealand few of the mountains have been scaled; many of the peaks and most of the glaciers are as yet unnamed; and there is still, in parts of the Middle Island, a fine field for exploration and discovery—geographical, geological, and botanical. The wonders of the Southern Alps are only beginning to be known; but the more they are known the more they are appreciated. The snow-line in New Zealand being so much lower than in Switzerland, the scenery, though the mountains are not quite so high, is of surpassing grandeur.

There are extensive glaciers on both sides of the range, those on the west being of exceptional beauty, as, from the greater abruptness of the mountain-slopes on that side, they descend to within about 700ft. of the sea-level, and into the midst of the evergreen forest. The largest glaciers on either side of the range are easily accessible.

The following gives the sizes of some of the glaciers on the eastern slope:—

Name.	Area of Glacier.	Length of Glacier.	Greatest Width.	Average Width.
	Acres.	Miles ch.	Miles ch.	Miles ch.
Tasman	13,664	18 0	2 14	1 15
Murchison	5,800	10 70	1 5	0 66
Godley	5,312	8 0	1 55	1 3
Mueller	3,200	8 0	0 61	0 50
Hooker	2,416	7 25	0 54	0 41

The Alletsch Glacier in Switzerland, according to Ball, in the "Alpine Guide," has an average width of one mile. It is in length and width inferior to the Tasman Glacier.

Numerous sounds or fiords penetrate the south-western coast. They are long, narrow, and deep (the depth of water at the upper part of Milford Sound is 1,270ft., although at the entrance only 130ft.), surrounded by giant mountains clothed with foliage to the snow-line, with waterfalls, glaciers, and snowfields at every turn. Some of the mountains rise almost precipitously from the water's edge to 5,000ft. and 6,000ft. above the sea. Near Milford, the finest of these sounds, is the great Sutherland Waterfall, 1,904ft. high.

The general surface of the northern portion of the Middle Island, comprising the Provincial Districts of Nelson and Marlborough, is mountainous, but the greater part is suitable for grazing purposes. There are some fine valleys and small plains suitable for agriculture, of which the Wairau Valley or Plain is the largest. Deep sounds, extending for many miles, break the coast-line abutting on Cook Strait. The City of Nelson is situated at the head of Blind Bay, which has a depth inwards from Cook Strait of about forty statute miles.

The Provincial District of Canterbury lies to the south of the Marlborough District, and on the eastern side of the island. To-

wards the north the land is undulating; then there is a stretch of almost perfectly level country extending towards the south-west 160 miles, after which, on the south, the country is undulating as far as the borders of the Otago District. On the east a block of hill-country rises abruptly from the plain and extends for some miles seaward. This is Banks Peninsula, containing several good harbours, the principal being Port Cooper, on the north, on which is situated Lyttelton, the chief port of the district: the harbour of Akaroa, one of the finest in the colony, is on the southern coast of this peninsula.

The District of Otago is, on the whole, mountainous, but has many fine plains and valleys suitable for tillage. The mountains, except towards the west coast, are generally destitute of timber, and suitable for grazing sheep. There are goldfields of considerable extent in the interior of this district. The inland lakes are also very remarkable features. Lake Wakatipu extends over fifty-four miles in length, but its greatest width is not more than four miles, and its area only 114 square miles. It is 1,070ft. above sea-level, and has a depth varying from 1,170ft. to 1,296ft. Te Anau Lake is somewhat larger, having an area of 132 square miles. These lakes are bounded on the west by broken, mountainous, and wooded country, extending to the ocean.

The chief harbours in Otago are Port Chalmers, at the head of which Dunedin is situated, and the Bluff Harbour, at the extreme south.

The District of Westland, extending along the west coast of the Middle Island, abreast of Canterbury, is more or less auriferous throughout. The western slopes of the central range of mountains are clothed with forest-trees to the snow-line; but on the eastern side timber is scarce, natural grasses covering the ground.

The rivers in the Middle Island are for the most part mountain torrents, fed by glaciers in the principal mountain ranges. When the snow melts they rise in flood, forming, where not confined by rocky walls, beds of considerable width, generally covered by enormous deposits of shingle. The largest river in the colony as regards volume of water is the Clutha. It is 154 miles in length, but is only navigable for boats or small river-steamers for about thirty miles. The Rivers Buller, Grey, and Hokitika, on the West Coast, are navigable for a short distance from their mouths. They form the only ports in the Westland District. In their unimproved state they admitted, owing to the bars at their mouths, none but vessels of small draught; but, in consequence of the importance of the Grey and Buller Rivers as the sole ports available for the coal-export trade, large harbour-works have been undertaken, resulting in the deepening of the beds of these rivers, and giving a depth of from 18ft. to 26ft. of water on the bar.

The area of level or undulating land in the Middle Island available for agriculture is estimated at about 15,000,000 acres. About 13,000,000 are suitable for pastoral purposes only, or may become

so when cleared of forest and sown with grass-seed. The area of barren land and mountain-tops is estimated at about 9,000,000 acres.

Stewart Island.

Foveaux Strait separates the Middle from Stewart Island. This last island has an area of only 425,390 acres.

Stewart Island is a great tourist resort during the summer months, and is easily reached by steamer from the Bluff, distant about 25 miles.

The principal peak is Mount Anglem, 3,200 ft. above sea-level, which has an extinct crater at its summit. Most of the island is rugged and forest-clad; the climate is mild, frost being seldom experienced; and the soil, when cleared of bush, is fertile.

The chief attractions are the numerous bays and fiords. Paterson Inlet is a magnificent sheet of water, about ten miles by four miles, situated close to Half-moon Bay, the principal port, where over two hundred people live. Horse-shoe Bay and Port William are within easy reach of Half-moon Bay. Port Pegasus, a land-locked sheet of water about eight miles by a mile and a half, is a very fine harbour. At "The Neck" (Paterson Inlet) there is a Native settlement of over a hundred Maoris and half-castes. The bush is generally very dense, with thick undergrowth. Rata, black-pine, white-pine, miro, and totara are the principal timber trees. Fish are to be had in great abundance and variety; oysters form an important industry. Wild pigeons, ducks, and mutton-birds are plentiful.

The Outlying Islands.

The outlying group of the Chatham Islands, 480 statute miles east-south-east from Wellington, and 536 miles eastward of Lyttelton, consists of two principal islands and several unimportant islets. The largest island contains about 222,490 acres, of which an irregular-shaped lake or lagoon absorbs 45,960 acres. About one quarter of the surface of the land is covered with forest, the rest with fern or grass. The hills nowhere rise to a great height. Pitt Island is the next in size; the area is 15,330 acres. The greater portion of both islands is used for grazing sheep.

The Kermadec group of islands, four in number, is situated between 29° 10′ and 31° 30′ south latitude, and between 177° 45′ and 179° west longitude. They are named Raoul or Sunday Island, Macaulay Island, Curtis Island, and L'Espérance or French Rock. The principal island, Sunday, is 600 miles distant from Auckland. The islands are volcanic, and in two of them signs of activity are still to be seen. The rainfall is plentiful, but not excessive. The climate is mild and equable, and slightly warmer than the north of New Zealand. The following are the areas of the islands and islets of the group: Sunday Island, 7,200 acres; Herald group of islets, 85 acres; Macaulay Island, 764 acres; Curtis Islands, 128 acres and 19 acres; L'Espérance, 12 acres: total, 8,208 acres. Sunday Island is twenty miles in circumference, roughly triangular

in shape, and at the highest point 1,723ft. above the sea-level. It is rugged and broken over a very large extent of its surface, and, except in a few places, covered with forest. The soil everywhere on the island is very rich, being formed by the decomposition of a dark-coloured pumiceous tuff and a black andesitic lava, with which is closely mixed a fine vegetable mould. The great luxuriance and richness of the vegetation bear witness to the excellence of the soil, which is everywhere—except where destroyed by eruptions, and on the steep cliffs—the same rich loam. Want of water is one of the drawbacks. Three of the four lakes on the island are fresh, but so difficult of approach as to be practically useless.

The Auckland Islands are about 290 miles south of Bluff Harbour, their position being given on the Admiralty chart as latitude 50° 31′ 29″ S., and longitude 166° 19′ 12″ E. They have several good harbours. Port Ross, at the north end of the principal island, was described by the eminent French commander, D'Urville, as one of the best harbours of refuge in the known world. At the southern end of the island there is a through passage extending from the east to the west coast. It has been variously named Adam's Strait and Carnley Harbour, and forms a splendid sheet of water. The largest of the islands is about 27 miles long by about 15 miles broad, and is very mountainous, the highest part being about 2,000ft. above the sea. The west coast is bold and precipitous, but the east coast has several inlets. The wood on the island is, owing to the strong prevailing wind, scrubby in character. The New Zealand Government maintains at this island a dépôt of provisions and clothing for the use of shipwrecked mariners.

The Cook Islands, with others recently annexed, have been specially referred to.

Constitution.

British sovereignty was proclaimed over New Zealand in January, 1840, and the country became a dependency of New South Wales until the 3rd May, 1841, when it was made a separate colony. The seat of Government was at Auckland, and the Executive included the Governor, and three gentlemen holding office as Colonial Secretary, Attorney-General, and Colonial Treasurer.

The successors of these gentlemen, appointed in August, 1841, May, 1842, and January, 1844, respectively, continued in office until the establishment of Responsible Government on the 7th May, 1856. Only one of them—Mr. Swainson, the Attorney-General—sat as a member of the first General Assembly, opened on the 27th May, 1854. During the session of that year there were associated with the permanent members of the Executive Council certain members of the General Assembly. These latter held no portfolios.

The Government of the colony was at first vested in the Governor, who was responsible only to the Crown; but in 1852 an Act granting representative institutions to the colony was passed by the Imperial Legislature. Under it the constitution of a General Assembly for the whole colony was provided for, to

consist of a Legislative Council, the members of which were to be nominated by the Governor, and of an elective House of Representatives. The first session of the General Assembly was opened on the 27th May, 1854, but the members of the Executive were not responsible to Parliament. The first Ministers under a system of Responsible Government were appointed on the 18th April, 1856. By the Act of 1852 the colony was divided into six provinces, each to be presided over by an elective Superintendent, and to have an elective Provincial Council, empowered to legislate, except on certain specified subjects. The franchise amounted practically to household suffrage. In each case the election was for four years, but a dissolution of the Provincial Council by the Governor could take place at any time, necessitating a fresh election both of the Council and of the Superintendent. The Superintendent was chosen by the whole body of electors of the province; each member of the Provincial Council by the electors of a district. The Provincial Governments, afterwards increased to nine, remained as integral parts of the Constitution of the colony until the 1st November, 1876, when they were abolished by an Act of the General Assembly, that body having been vested with the power of altering the Constitution Act. On the same day an Act of the General Assembly which subdivided the colony (exclusive of the areas included within municipalities) into counties, and established a system of local county government, came into force.

GOVERNMENT.

The Governor is appointed by the King. His salary is £5,000 a year, with an annual allowance of £1,500 on account of his establishment, and of £500 for travelling-expenses, provided by the colony.

Members of the Legislative Council hold their seats under writs of summons from the Governor. Till the year 1891 the appointments were for life; but in September of that year an Act was passed making appointments after that time tenable for seven years only, though Councillors may be reappointed. In either case seats may be vacated by resignation or extended absence. Two members of the Council are aboriginal native chiefs.

The members of the House of Representatives are elected for three years from the time of each general election; but at any time a dissolution of Parliament by the Governor may render a general election necessary. Four of the members are representatives of Native constituencies. An Act was passed in 1887 which provided that, on the dissolution of the then General Assembly, the number of members to be thereafter elected to the House of Representatives should be seventy-four in all, of whom four were to be elected, under the provisions of the Maori Representation Acts, as representatives of Maori electors only. For the purposes of European representation the colony is divided into sixty-two electoral districts, four of which—the Cities of Auckland, Wellington, Christchurch, and Dunedin—return each three members, and all the other

electorates one each.* Members of the House of Representatives are chosen by the votes of the inhabitants in every electoral district appointed for that purpose. By "The Members of the House of Representatives Disqualification Act, 1897," no person, who, being a bankrupt within the meaning of "The Bankruptcy Act, 1892," has not obtained an order of discharge under that Act shall be qualified to be nominated as a candidate for election, or to be elected, or to take his seat as a member of the House of Representatives, anything in "The Electoral Act, 1893," or any other Act to the contrary notwithstanding.

In 1889 an amendment of the Representation Act was passed, which contained a provision prohibiting any elector from giving his vote in respect of more than one electorate at any election. "The Electoral Act, 1893," extended to women of both races the right to register as electors, and to vote at the elections for members of the House of Representatives. The qualification for registration is the same for both sexes. No person is entitled to be registered on more than one electoral roll within the colony. Women are not qualified to be elected as members of the House of Representatives. The electoral laws are the subject of special comment further on in this work. Every man registered as an elector, and not coming within the meaning of section 8 of "The Electoral Act, 1893," (*i.e.*, alien, lunatic, public offender, defaulter, &c.), is qualified to be elected a member of the House of Representatives for any electoral district. For European representation every adult person, if resident one year in the colony and three months in one electoral district, can be registered as an elector. Freehold property of the value of £25 held for six months preceding the day of registration until 1896 entitled a man or woman to register, if not already registered under the residential qualification. But the Amendment Act of 1896 abolished the property qualification (except in case of existing registrations), and residence alone now entitles a man or woman to have his or her name placed upon an electoral roll. For Maori representation every adult Maori resident in any Maori electoral district (of which there are four only in the colony) can vote. Registration is not required in Native districts.

The Seat of Government.

Up to the year 1865 the seat of Government of New Zealand was at Auckland. Several attempts were made by members of Parliament, by motions in the Legislative Council and House of Representatives, to have it removed to some more central place; but it was not until November, 1863, that Mr. Domett (the then ex-Premier) was successful in carrying resolutions in the House of

* "The Representation Act, 1900," provides that, on the expiration by effluxion of time or other sooner determination of the present General Assembly, the number of members for purposes of European representation to be thereafter elected to the House of Representatives shall be seventy-six instead of seventy, and that there are to be six new districts, one for each additional member.

Representatives that steps should be taken for appointing some place in Cook Strait as the permanent seat of Government in the colony. The resolutions adopted were: "(1.) That it has become necessary that the seat of Government in the colony should be transferred to some suitable locality in Cook Strait. (2.) That, in order to promote the accomplishment of this object, it is desirable that the selection of the particular site in Cook Strait should be left to the arbitrament of an impartial tribunal. (3.) That, with this view, a Bill should be introduced to give effect to the above resolutions." On the 25th November an address was presented to the Governor, Sir George Grey, K.C.B., by the Commons of New Zealand, requesting that the Governors of the Colonies of New South Wales, Victoria, and Tasmania, might each be asked to appoint one Commissioner for the purpose of determining the best site in Cook Strait. Accordingly, the Hon. Joseph Docker, M.L.C., New South Wales; the Hon. Sir Francis Murphy, Speaker of the Legislative Council, Victoria; and R. C. Gunn, Esq., Tasmania, were appointed Commissioners.

These gentlemen, having made a personal inspection of all suitable places, arrived at the unanimous decision "that Wellington, in Port Nicholson, was the site upon the shores of Cook Strait which presented the greatest advantages for the administration of the government of the colony."

The seat of Government was, therefore, in accordance with the recommendation of the Commissioners, removed to Wellington in February, 1865.

Public Works.

Nearly all the public works of New Zealand are in the hands of the Government of the colony, and in the early days they simply kept pace with the spread of settlement. In 1870, however, a great impetus was given to the progress of the whole country by the inauguration of the "Public Works and Immigration Policy," which provided for carrying out works in advance of settlement. Railways, roads, and water-races were constructed, and immigration was conducted on a large scale. As a consequence, the population increased from 267,000 in 1871 to 501,000 in 1881, and to 772,455 in March, 1901, exclusive of Maoris.

SUCCESSIVE GOVERNORS.

Succession of Governors of New Zealand, and the Dates on which they assumed and retired from the Government.

Captain William Hobson, R.N., from Jan., 1840, to 10 Sept., 1842.

[British sovereignty was proclaimed by Captain Hobson in January, 1840, and New Zealand became a dependency of the Colony of New South Wales until 3rd May, 1841, at which date it was proclaimed a separate colony. From January, 1840, to May, 1841, Captain Hobson was Lieutenant-Governor of New Zealand under Sir George Gipps,

Governor of New South Wales, and from May, 1841, Governor of New Zealand; the seat of Government being at Auckland, where he died in September, 1842. From the time of Governor Hobson's death, in September, 1842, until the arrival of Governor Fitzroy, in December, 1843, the Government was carried on by the Colonial Secretary, Lieutenant Shortland.]

Lieutenant Shortland, Administrator, from 10 Sept., 1842, to 26 Dec., 1843.

Captain Robert Fitzroy, R.N., from 26 Dec., 1843, to 17 Nov., 1845.

Captain Grey (became Sir George Grey, K.C.B., in 1848), from 18 Nov., 1845, to 31 Dec., 1853.

[Captain Grey held the commission as Lieutenant-Governor of the colony until the 1st January, 1848, when he was sworn in as Governor-in-Chief over the Islands of New Zealand, and as Governor of the Province of New Ulster and Governor of the Province of New Munster. After the passing of the New Zealand Constitution Act, Sir George Grey was, on the 13th September, 1852, appointed Governor of the colony, the duties of which office he assumed on the 7th March, 1853. In August, 1847, Mr. E. J. Eyre was appointed Lieutenant-Governor of New Munster: he was sworn in, 28th January, 1848. On 3rd January, 1848, Major-General George Dean Pitt was appointed Lieutenant-Governor of New Ulster: he was sworn in, 14th February, 1848; died, 8th January, 1851; and was succeeded as Lieutenant-Governor by Lieutenant-Colonel Wynyard, appointed 14th April, 1851; sworn in, 26th April, 1851. The duties of the Lieutenant-Governor ceased on the assumption by Sir George Grey of the office of Governor, on the 7th March, 1853.]

Lieutenant-Colonel Robert Henry Wynyard, C.B., Administrator, from 3 Jan., 1854, to 6 Sept., 1855.

Colonel Thomas Gore Browne, C.B., from 6 Sept., 1855, to 2 Oct., 1861.

Sir George Grey, K.C.B., Administrator, from 3 Oct., 1861; Governor, from 4 Dec., 1861, to 5 Feb., 1868.

Sir George Ferguson Bowen, G.C.M.G., from 5 Feb., 1868, to 19 Mar., 1873.

Sir George Alfred Arney, Chief Justice, Administrator, from 21 Mar. to 14 June, 1873.

Sir James Fergusson, Baronet, P.C., from 14 June, 1873, to 3 Dec., 1874.

The Marquis of Normanby, P.C., G.C.M.G., Administrator, from 3 Dec., 1874; Governor, from 9 Jan., 1875, to 21 Feb., 1879.

James Prendergast, Esquire, Chief Justice, Administrator, from 21 Feb. to 27 Mar., 1879.

Sir Hercules George Robert Robinson, G.C.M.G., Administrator, from 27 Mar., 1879; Governor, from 17 April, 1879, to 8 Sept., 1880.

James Prendergast, Esquire, Chief Justice, Administrator, from 9 Sept. to 29 Nov., 1880.

The Honourable Sir Arthur Hamilton Gordon, G.C.M.G., from 29 Nov., 1880, to 23 June, 1882.

Sir James Prendergast, Chief Justice, Administrator, from 24 June, 1882, to 20 Jan., 1883.
Lieutenant-General Sir William Francis Drummond Jervois, G.C.M.G., C.B., from 20 Jan., 1883, to 22 Mar., 1889.
Sir James Prendergast, Chief Justice, Administrator, from 23 Mar. to 2 May, 1889.
The Earl of Onslow, G.C.M.G., from 2 May, 1889, to 24 Feb., 1892.
Sir James Prendergast, Chief Justice, Administrator, from 25 Feb., to 6 June, 1892.
The Earl of Glasgow, G.C.M.G., from 7 June, 1892, to 6 Feb., 1897.
Sir James Prendergast, Chief Justice, Administrator, from 8 Feb., 1897, to 9th Aug., 1897.
The Earl of Ranfurly, G.C.M.G., from 10th Aug., 1897.

SUPREME COURT JUDGES.

SUPREME COURT JUDGES, PAST AND PRESENT, WITH DATES OF APPOINTMENT, AND OF RESIGNATION OR DEATH.

Sir W. Martin, appointed Chief Justice, 10 Jan., 1842. Resigned, 12 June, 1857.
H. S. Chapman, appointed, 26 Dec., 1843. Resigned, 30 July, 1850. Reappointed, 23 Mar., 1864. Resigned, 31 Mar., 1875.
S. Stephen, appointed, 30 July, 1850. Appointed Acting Chief Justice, 20 Oct., 1855. Died, 13 Jan., 1858.
Daniel Wakefield, appointed, Oct., 1855. Died, Oct., 1857.
Hon. H. B. Gresson, appointed temporarily, 8 Dec., 1857. Permanently, 1 July, 1862. Resigned, 31 Mar., 1875.
Sir G. A. Arney, appointed Chief Justice, 1 Mar., 1858. Resigned 31 Mar., 1875.
A. J. Johnston, appointed, 2 Nov., 1858. Died, 1 June, 1888.
C. W. Richmond, appointed, 20 Oct., 1862. Died, 3 Aug., 1895.
J. S. Moore, appointed temporarily, 15 May, 1866. Relieved, 30 June, 1868.
C. D. R. Ward, appointed temporarily, 1 Oct., 1868. Relieved, May, 1870. Appointed temporarily, 21 Sept., 1886. Relieved, 12 Feb., 1889.
Sir J. Prendergast, appointed Chief Justice, 1 April, 1875. Resigned, 25 May, 1899.
T. B. Gillies, appointed, 3 Mar., 1875. Died, 26 July, 1889.
J. S. Williams, appointed, 3 Mar., 1875.
J. E. Denniston, appointed, 11 Feb., 1889.
E. T. Conolly, appointed, 19 Aug., 1889.
Hon. Sir P. A. Buckley, K.C.M.G., appointed, 20 Dec., 1895. Died, 18 May, 1896.
W. B. Edwards, appointed, 11 July, 1896.
F. W. Pennefather, appointed temporarily, 25 April, 1898. Resigned, 24 April, 1899.

Hon. Sir Robert Stout, K.C.M.G., appointed Chief Justice, 22 June, 1899.
J. C. Martin, acting Judge, appointed, 12 April, 1900. Resigned, 4 Dec., 1900.
Theophilus Cooper, appointed, 21 Feb., 1901.

EXECUTIVE COUNCIL, 1843–56.

MEMBERS OF THE EXECUTIVE COUNCIL OF THE COLONY OF NEW ZEALAND PREVIOUS TO THE ESTABLISHMENT OF RESPONSIBLE GOVERNMENT (NOT INCLUDING THE OFFICERS COMMANDING THE FORCES).

Willoughby Shortland, Colonial Secretary, from 3 May, 1841, to 31 Dec., 1843; succeeded by Mr. Sinclair.
Francis Fisher, Attorney-General, from 3 May to 10 Aug., 1841; succeeded by Mr. Swainson.
George Cooper, Colonial Treasurer, from 3 May, 1841, to 9 May, 1842; succeeded by Mr. Shepherd.
William Swainson, Attorney-General, from 10 Aug., 1841, to 7 May, 1856.
Alexander Shepherd, Colonial Treasurer, from 9 May, 1842, to 7 May, 1856.
Andrew Sinclair, Colonial Secretary, from 6 Jan., 1844, to 7 May, 1856.

[The three gentlemen last mentioned were nominated by Her late Majesty as *ex officio* members of the Executive Council. Two of them, the Colonial Secretary and the Colonial Treasurer, were not members of the General Assembly, opened for the first time 27th May, 1854, but all three remained in office until the establishment of Responsible Government.]

James Edward FitzGerald, M.H.R., without portfolio, from 14 June to 2 Aug., 1854.
Henry Sewell, M.H.R., without portfolio, from 14 June to 2 Aug., 1854.
Frederick Aloysius Weld, M.H.R., without portfolio, from 14 June to 2 Aug., 1854.
Francis Dillon Bell, M.L.C., without portfolio, from 30 June to 11 July, 1854.
Thomas Houghton Bartley, M.L.C., without portfolio, from 14 July to 2 Aug., 1854.
Thomas Spencer Forsaith, M.H.R., without portfolio, from 31 Aug. to 2 Sept., 1854.
Edward Jerningham Wakefield, M.H.R., without portfolio, from 31 Aug. to 2 Sept., 1854.
William Thomas Locke Travers, M.H.R., without portfolio, 31 Aug. to 2 Sept., 1854.
James Macandrew, M.H.R., without portfolio, from 31 Aug. to 2 Sept., 1854.

PARLIAMENTS.

NUMBER OF PARLIAMENTS SINCE THE CONSTITUTION ACT PASSED FOR CONFERRING REPRESENTATIVE INSTITUTIONS UPON THE COLONY OF NEW ZEALAND, WITH THE DATES OF OPENING AND CLOSING OF SESSIONS AND DATES OF DISSOLUTION.

Parliament.	Date of Opening of Sessions.	Date of Prorogation.
First (dissolved 15th September, 1855)	27 May, 1854 ..	9 August, 1854.
	31 August, 1854 ..	16 September, 1854.
	8 August, 1855 ..	15 September, 1855.
Second (dissolved 5th November, 1860)	15 April, 1856 ..	16 August, 1856.
	(No session in 1857)	
	10 April, 1858 ..	21 August, 1858.
	(No session in 1859)	
	30 July, 1860 ..	5 November, 1860.
Third (dissolved 27th January, 1866)	3 June, 1861 ..	7 September, 1861.
	7 July, 1862 ..	15 September, 1862.
	19 October, 1863 ..	14 December, 1863.
	24 November, 1864	13 December, 1864.
	26 July, 1865 ..	30 October, 1865.
Fourth (dissolved 30th December, 1870)	30 June, 1866 ..	8 October, 1866.
	9 July, 1867 ..	10 October, 1867.
	9 July, 1868 ..	20 October, 1868.
	1 June, 1869 ..	3 September, 1869.
	14 June, 1870 ..	13 September, 1870.
Fifth (dissolved 6th December, 1875)	14 August, 1871 ..	16 November, 1871.
	16 July, 1872 ..	25 October, 1872.
	15 July, 1873 ..	3 October, 1873.
	3 July, 1874 ..	31 August, 1874.
	20 July, 1875 ..	21 October, 1875.
Sixth (dissolved 15th August, 1879)	15 June, 1876 ..	31 October, 1876.
	19 July, 1877 ..	10 December, 1877.
	26 July, 1878 ..	2 November, 1878.
	11 July, 1879 ..	11 August, 1879.
Seventh (dissolved 8th November, 1881)	24 September, 1879	19 December, 1879.
	28 May, 1880 ..	1 September, 1880.
	9 June, 1881 ..	24 September, 1881.
Eighth (dissolved 27th June, 1884)	18 May, 1882 ..	15 September, 1882.
	14 June, 1883 ..	8 September, 1883.
	5 June, 1884 ..	24 June, 1884.

PARLIAMENTS—*continued.*

Parliament.	Date of Opening of Sessions.	Date of Prorogation.
Ninth (dissolved 15th July, 1887)	7 August, 1884	10 November, 1884.
	11 June, 1885	22 September, 1885.
	13 May, 1886	18 August, 1886.
	26 April, 1887	10 July, 1887.
Tenth (dissolved 3rd October, 1890)	6 October, 1887	23 December, 1887.
	10 May, 1888	31 August, 1888.
	20 June, 1889	19 September, 1889.
	19 June, 1890	18 September, 1890.
Eleventh (dissolved 8th November, 1893)	23 January, 1891	31 January, 1891.
	11 June, 1891	5 September, 1891.
	23 June, 1892	12 October, 1892.
	22 June, 1893	7 October, 1893.
Twelfth (dissolved 14th November, 1896)	21 June, 1894	24 October, 1894.
	20 June, 1895	2 November, 1895.
	11 June, 1896	19 October, 1896.
Thirteenth (dissolved 15th November, 1899)	7 April, 1897	12 April, 1897.
	23 September, 1897	22 December, 1897.
	24 June, 1898	5 November, 1898.
	23 June, 1899	24 October, 1899.
Fourteenth	22nd June, 1900	22nd October, 1900.
	1st July, 1901.	

SUCCESSIVE MINISTRIES

SINCE THE ESTABLISHMENT OF RESPONSIBLE GOVERNMENT IN NEW ZEALAND IN 1856.

Name of Ministry.	Assumed Office.	Retired.
1. Bell-Sewell	7 May, 1856	20 May, 1856.
2. Fox	20 May, 1856	2 June, 1856.
3. Stafford	2 June, 1856	12 July, 1861.
4. Fox	12 July, 1861	6 August, 1862.
5. Domett	6 August, 1862	30 October, 1863.
6. Whitaker-Fox	30 October, 1863	24 November, 1864.
7. Weld	24 November, 1864	16 October, 1865.
8. Stafford	16 October, 1865	28 June, 1869.
9. Fox	28 June, 1869	10 September, 1872.
10. Stafford	10 September, 1872	11 October, 1872.
11. Waterhouse	11 October, 1872	3 March, 1873.
12. Fox	3 March, 1873	8 April, 1873.
13. Vogel	8 April, 1873	6 July, 1875.
14. Pollen	6 July, 1875	15 February, 1876.
15. Vogel	15 February, 1876	1 September, 1876.

SUCCESSIVE MINISTRIES—*continued.*

Name of Ministry.	Assumed Office.	Retired.
16. Atkinson	1 September, 1876	13 September, 1876.
17. Atkinson (reconstituted) ..	13 September, 1876	13 October, 1877.
18. Grey	15 October, 1877 ..	8 October, 1879.
19. Hall	8 October, 1879 ..	21 April, 1882.
20. Whitaker	21 April, 1882 ..	25 September, 1883.
21. Atkinson	25 September, 1883	16 August, 1884.
22. Stout-Vogel	16 August, 1884 ..	28 August, 1884.
23. Atkinson	28 August, 1884 ..	3 September, 1884.
24. Stout-Vogel	3 September, 1884	8 October, 1887.
25. Atkinson	8 October, 1887 ..	24 January, 1891.
26. Ballance	24 January, 1891 ..	1 May, 1893.*
27. Seddon	1 May, 1893.	

* Owing to the death of the Premier, the Hon. J. Ballance, on 27th April, 1893.

PREMIERS OF SUCCESSIVE MINISTRIES.

Name of Premier.	Name of Premier.
Henry Sewell.	Sir Julius Vogel, K.C.M.G.
William Fox.	Harry Albert Atkinson.
Edward William Stafford.	Harry Albert Atkinson (Ministry reconstituted).
William Fox.	Sir George Grey, K.C.B.
Alfred Domett.	Hon. John Hall.
Frederick Whitaker.	Frederick Whitaker, M.L.C.
Frederick Aloysius Weld.	Harry Albert Atkinson.
Edward William Stafford.	Robert Stout.
William Fox.	Harry Albert Atkinson.
Hon. Edward William Stafford.	Sir Robert Stout, K.C.M.G.
George Marsden Waterhouse.	Sir Harry Albert Atkinson, K.C.M.G.
Hon. William Fox.	John Ballance.
Hon. Julius Vogel, C.M.G.	Rt. Hon. Richard John Seddon, P.C.
Daniel Pollen, M.L.C.	

SPEAKERS OF THE LEGISLATIVE COUNCIL,

WITH DATES OF THEIR APPOINTMENT AND DATES OF RETIREMENT OR DEATH.

Name of Speaker.	Date of Appointment.	Date of Retirement or Death.
Hon. William Swainson	16 May, 1854 ..	8 August, 1855.
Hon. Frederick Whitaker	8 August, 1855 ..	12 May, 1856.
Hon. Thomas Houghton Bartley ..	12 May, 1856 ..	1 July, 1868.
Hon. Sir John Larkins Cheese Richardson, Kt.	1 July, 1868 ..	14 June, 1879.
Hon. Sir William Fitzherbert, K.C.M.G.	14 June, 1879 ..	23 January, 1891.
Hon. Sir Harry Albert Atkinson, K.C.M.G.	23 January, 1891	28 June, 1892.
Hon. Sir Henry John Miller	8 July, 1892. 6 October, 1897.	

SPEAKERS OF THE HOUSE OF REPRESENTATIVES,

WITH DATES OF THEIR ELECTION AND DATES OF RETIREMENT.

Name of Speaker.	Date of Election.	Date of Retirement.
Sir Charles Clifford, Bart.	26 May, 1854	
	15 April, 1856 ..	3 June, 1861.
Sir David Monro, Kt. Bach. ..	3 June, 1861	
	30 June, 1866 ..	13 Sept., 1870.
Sir Francis Dillon Bell, K.C.M.G., C.B.	14 August, 1871 ..	21 October, 1875.
Sir William Fitzherbert, K.C.M.G. ..	15 June, 1876 ..	13 June, 1879.
Sir George Maurice O'Rorke, Kt. Bach.	11 July, 1879	
	24 September, 1879	
	18 May, 1882	
	7 August, 1884	
	6 October, 1887	3 October, 1890.
Hon. Major William Jukes Steward ..	23 January, 1891	8 November, 1893.
Hon. Sir George Maurice O'Rorke, Kt. Bach.	21 June, 1894	
	6 April, 1897.	
	22 June, 1900.	

FOREIGN CONSULS.

CONSULS OF FOREIGN COUNTRIES RESIDING IN, OR WITH JURISDICTION OVER, NEW ZEALAND, 3RD APRIL, 1901.

Country represented.	Office held.	Name.	Place of Residence.
Austria-Hungary	Consul ..	E. Langguth	Auckland.
Belgium ..	Consul-General	Edouard Pollet	Melbourne.
" ..	Consul ..	Hon. Charles John Johnston	Wellington.
" ..	" ..	Joseph James Kinsey ..	Christchurch.
" ..	" ..	John Burns	Auckland.
" ..	" ..	George Lyon Denniston ..	Dunedin.
Chili	" ..	William Brown	Sydney.
Denmark ..	Consul (for North Island); Chief Consular Officer in New Zealand	Francis Henry Dillon Bell ..	Wellington.
" ..	Consul (for South Island)	Emil Christian Skog ..	Christchurch.
" ..	Vice Consul ..	Frederick Ehrenfrid Baume	Auckland.
" ..	" ..	William Edward Perry ..	Hokitika.
" ..	" ..	Peter Jorgen Wilhelm Holsted	Dunedin.
France ..	Consul (for New Zealand)	Count Louis Antoine Marie Joseph Henri De Courte	Wellington.
" ..	Hon. Vice Consul	Percival Clay Neill ..	Dunedin.
" ..	Consular Agent	George Humphreys ..	Christchurch.
" ..	" ..	George Dunnet	Auckland.

FOREIGN CONSULS—*continued.*

Country represented.	Office held.	Name.	Place of Residence.
German Empire	Consul-General for Commonwealth of Australia, New Zealand, and Fiji	Paul Von Buri	Sydney.
"	Consul ..	Carl Seegner	Auckland.
"	" ..	Bendix Hallenstein ..	Dunedin.
"	" ..	Philip Kippenberger ..	Christchurch.
"	" ..	Friedrich August Krull ..	Wanganui.
"	Vice-Consul ..	Eberhard Focke	Wellington.
Hawaiian Islands	Consul-General (for Australasia)	W. E. Dixon	Sydney.
"	Consul, Acting	George Dunnet	Auckland.
Italy	Consul-General (in Australia)	Commendatore P. Corte ..	Melbourne.
"	Consular Agent	Thomas Wallace	Christchurch
"	"	George Fisher	Wellington.
"	"	Edward Bowes Cargill ..	Dunedin.
"	"	Geraldo Giuseppe Perotti ..	Greymouth.
"	"	Richard A. Carr	Auckland.
Japan ..	Consul ..	A. S. Aldrich	Wellington.
Netherlands ..	Consul-General	W. W. Bossehart	Melbourne.
" ..	Consul ..	Hon. Charles John Johnston	Wellington.
" ..	Vice-Consul ..	Edward Bowes Cargill ..	Dunedin.
" ..	" ..	Ambrose Millar	Auckland.
" ..	" ..	Harold Featherston Johnston	Wellington.
Portugal ..	Consul ..	John Duncan	"
" ..	Vice-Consul ..	Henry Rees George ..	Auckland.
" ..	" ..	Ian G. Duncan	Wellington.
" ..	" ..	Charles William Rattray ..	Dunedin.
Russia ..	Consul ..	Nicolas Passek	Melbourne.
Spain.. ..	Vice-Consul ..	(Vacant)	Christchurch.
"	Acting " ..	Thomas Jamieson.. ..	"
"	Honorary Vice-Consul	Alexander H. Turnbull ..	Wellington.
Sweden and Norway	Consul ..	Arthur Edward Pearce ..	Wellington.
"	Vice-Consul ..	Frank Graham	Christchurch.
"	Acting " ..	Frederick E. Baume ..	Auckland.
United States ..	Consul (for New Zealand)	Frank Dillingham ..	Auckland.
" ..	Vice-Consul ..	Leonard A. Bachelder ..	Auckland.
" ..	Consular Agent	Robert Pitcaithley ..	Christchurch.
" ..	"	John Duncan	Wellington.
" ..	"	Frederick Orlando Bridgman	Dunedin.

AGENT-GENERAL FOR NEW ZEALAND IN LONDON.

The Hon. W. P. Reeves, Westminster Chambers, 13, Victoria Street, S.W. Secretary—Walter Kennaway, C.M.G.

THE COLONIAL OFFICE.

APRIL, 1901.

(DOWNING STREET, S.W., LONDON), WITH DATES OF APPOINTMENT.

Principal Secretary of State for the Colonies—The Right Hon. Joseph Chamberlain, M.P., 28th June, 1895.

Under-Secretaries: Parliamentary—The Right Hon. the Earl of Onslow, G.C.M.G., November, 1900. Permanent—Sir Montague Frederick Ommaney, K.C.M.G., 1900.

Assistant Under-Secretaries: Frederick Graham, 1st March, 1897; Charles P. Lucas; H. B. Cox (Legal); and Reginald L. Antrobus, C.B.

CROWN AGENTS FOR THE COLONIES.

DOWNING STREET, S.W. CITY OFFICE: 1, TOKENHOUSE BUILDINGS, E.C., LONDON.

Crown Agents—Ernest Edward Blake, Major Maurice Alexander Cameron, R.E., C.M.G., and William Hepworth Mercer.

HONOURS HELD BY COLONISTS.

Buller, Sir Walter Lawry, F.R.S., C.M.G., 1875; K.C.M.G., 1886.
Cadman, Hon. Alfred Jerome, C.M.G., 1901.
Grace, Hon. Morgan Stanislaus, C.M.G., 1890.
Gresson, Hon. H.B., 1877.
Gudgeon, Lieut.-Colonel Walter Edward, C.M.G., 1901.
Hall, Hon. Sir John, K.C.M.G., 1882.
Hector, Sir James, F.R.S., C.M.G., 1875; K.C.M.G., 1887.
Kennaway, Walter, Esq., C.M.G., 1897.
McKenzie, Hon. Sir John, K.C.M.G., 1901.
Miller, Hon. Sir Henry John, Knt.
O'Rorke, Hon. Sir George Maurice, Knt. Bach., 1880.
Perceval, Sir Westby Brook, K.C.M.G., 1894.
Prendergast, Hon. Sir James, Knt. Bach., 1881.
Richardson, Hon. Edward, C.M.G., 1879.
Roberts, John, Esq., C.M.G., 1891.
Seddon, Right Hon. Richard John, P.C., 1897.
Stout, Hon. Sir Robert, K.C.M.G., 1886.
Walker, Hon. William Campbell, C.M.G., 1901.
Ward, Hon. Sir Joseph George, K.C.M.G., 1901.
Whitmore, Hon. Colonel Sir George Stoddart, C.M.G., 1869; K.C.M.G., 1882.

PERSONS ALLOWED TO RETAIN THE TITLE OF "HONOURABLE" WITHIN HER MAJESTY'S DOMINIONS.

By despatch from the Secretary of State for the Colonies, dated Downing Street, 15th June, 1893, His Excellency the Governor was apprised that the title of "Honourable," appertaining to Members of the Executive and Legislative Councils in colonies possessing Responsible Government, whether confined to duration of office or continued for life, was approved by Her late Majesty for use and recognition throughout her dominions, either during office or for life, as the case may be.

By further despatch of 10th March, 1894, the Secretary of State announced that he was prepared in future to submit for the approval of the Sovereign the recommendation of the Governor of any colony having Responsible Government that the President of the Legislative Council or the Speaker of the Legislative Assembly may, on quitting office after three years' service in their respective offices, be permitted to retain the title of "Honourable." This title is now held by Sir G. M. O'Rorke and Major William Jukes Steward.

Besides the Members of the Executive and Legislative Councils, the following ex-Ministers whose names do not appear in the list given above are allowed, as such, to retain the title of "Honourable": Bryce, John, 1884; Fergus, Thomas, 1891; Haultain, Colonel T. M., 1870; Hislop, Thomas W., 1891; Johnston, Walter W., 1884; Mitchelson, Edwin, 1891; Oliver, Richard, 1884; Reeves, William P., 1896; Richardson, George F., 1891; Rolleston, William, 1884; Thompson, Thomas, 1900; Tole, Joseph A., 1888.

GOVERNOR OF NEW ZEALAND.

RANFURLY, His Excellency The Right Honourable Sir Uchter John Mark, fifth Earl of (Ireland, 1831), Viscount Northland, (1791), Baron Welles (1781), Lord-in-Waiting to Her Majesty (1895–97), Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George; Knight of Justice and Member of the Council of the Order of St. John of Jerusalem; son of third earl, brother of fourth earl; born 14th August, 1856; succeeded, 1875; married, 1880, the Honourable Constance Elizabeth, only child of seventh Viscount Charlemont, C.B. Living issue: One son (Viscount Northland), two daughters (Ladies Constance and Eileen Knox). Appointed 6th April, 1897, and assumed office 10th August, 1897, as Governor and Commander-in-Chief in and over Her Majesty's Colony of New Zealand and its Dependencies. Salary, £5,000. Allowance on account of establishment £1,500, and travelling-expenses £500 per annum. The allowance is not payable for any period during which the Governor is absent from the colony. Residences: Northland House, Dungannon, Ireland; Government House, Wellington; Government House, Auckland.

Private Secretary and Aide-de-Camp: Dudley Alexander (Captain, "The Prince of Wales's Own," West Yorkshire Regiment).

Assistant Private Secretary: The Honourable Charles Edward Hill-Trevor.

ADMINISTRATOR OF THE GOVERNMENT. — The Chief Justice appointed under a dormant commission.

EXECUTIVE COUNCIL.

20TH JUNE, 1901.

THE annual appropriation for Ministers' salaries is fixed by statute at the sum of £8,900, of which £1,600 is for the Prime Minister, £1,300 for the Minister for Railways, and £1,000 for each of six other Ministers. All Ministers to whom salaries are appropriated are members of the Executive Council, holding one or more of the offices specified by law. Members of the Executive Council travelling within the colony on public service are entitled to allowance not exceeding £1 10s. per day when so engaged, but not during the time a Minister is attending a session of the General Assembly. The members of the Executive Council to whom salaries are payable, and who are not otherwise provided with residences at the seat of Government, are entitled to an allowance in lieu thereof at the rate of £200 a year.

The Executive Council now consists of:—

His Excellency the GOVERNOR presiding.

Rt. Hon. Richard John Seddon, P.C., Prime Minister, Colonial Treasurer, Minister of Labour, and Minister of Defence.

Hon. Sir Joseph George Ward, K.C.M.G., Minister for Railways, Colonial Secretary, Postmaster-General and Commissioner of Electric Telegraphs, Minister of Industries and Commerce, and Minister of Public Health.

Hon. James Carroll, Native Minister and Commissioner of Stamp Duties.

Hon. William Campbell Walker, C.M.G., Minister of Education and Minister of Immigration.

Hon. William Hall-Jones, Minister for Public Works and Minister of Marine.

Hon. James McGowan, Minister of Justice and Minister of Mines. (23rd January, 1900.)

Hon. Thomas Young Duncan, Minister of Lands and Minister for Agriculture. (2nd July, 1900.)

Hon. Charles Houghton Mills, Commissioner of Trade and Customs. (29th October, 1900.)

(Vacant) Attorney-General.

Clerk of the Executive Council—Alexander James Willis.

THE GENERAL ASSEMBLY.

LEGISLATIVE COUNCIL.

The number of members at present constituting the Legislative Council is forty-six. The number cannot be less than ten, but is otherwise unlimited. Prior to 1891 Councillors summoned by the Governor held their appointments for life; but on the 17th of September of that year an Act was passed giving the Council power to elect its own Speaker for a period of five years, and making future appointments to the Council tenable for seven years only, to be reckoned from the date of the writ of summons of the Councillor's appointment, though every such Councillor may be reappointed. The qualifications are that the person to be appointed be of the full age of twenty-one years, and a subject of His Majesty, either natural-born or naturalised by or under any Act of the Imperial Parliament or by or under any Act of the General Assembly of New Zealand. All contractors to the public service to an amount of over £50 and Civil servants of the colony are ineligible as Councillors. Payment of Councillors is at the rate of £150 a year, payable monthly. Actual travelling-expenses to and from Wellington are also allowed. A deduction of £1 5s. per sitting day is made in case of an absence, except through illness or other unavoidable cause, exceeding five sitting days in any one session. Under "The Legislative Council Act, 1891," a seat is vacated by any member of the Council: (1.) If he takes any oath or makes any declaration or acknowledgment of allegiance, obedience, or adherence to any foreign Prince or Power; or (2), if he does, or concurs in, or adopts any act whereby he may become a subject or citizen of any foreign State or Power, or is entitled to the rights, privileges, or immunities of a subject of any foreign State or Power; or (3), if he is a bankrupt, or compounds with his creditors under any Act for the time being in force; or (4), if he is a public defaulter, or is attainted of treason, or is convicted of felony or any infamous crime; or (5), if he resigns his seat by writing under his hand addressed to and accepted by the Governor; or (6), if for more than one whole session of the General Assembly he fails, without permission of the Governor notified to the Council, to give his attendance in the Council. By the Standing Orders of the Council, the presence of one-fourth of the members of the Council, exclusive of those who have leave of absence, is necessary to constitute a meeting for the exercise of its powers. This rule, however, may be altered from time to time by the Council.

The ordinary sitting-days are Tuesdays, Wednesdays, Thursdays, and Fridays, from 2.30 p.m. to 5 p.m., resuming again at 7.30 when necessary.

ROLL OF MEMBERS OF THE HONOURABLE THE LEGISLATIVE COUNCIL OF NEW ZEALAND.

(JUNE, 1901.)

Speaker—The Hon. Sir HENRY JOHN MILLER, Kt.

Chairman of Committees—The Hon. WILLIAM DOUGLAS HALL BAILLIE.

Name.	Provincial District.	Date of Appointment.
Arkwright, the Hon. Francis	Wellington.	13 December, 1895.
Baillie, the Hon. William Douglas Hall ..	Marlborough.	8 March, 1861.†
Barnicoat, the Hon. John Wallis ..	Nelson.	14 May, 1883.†
Bolt, the Hon. William Mouat	Otago.	15 October, 1892.*
Bonar, the Hon. James Alexander ..	Westland.	27 June, 1868.†
Bowen, the Hon. Charles Christopher ..	Canterbury.	20 January, 1891.†
Cadman, the Hon. Alfred Jerome, C.M.G.	Auckland.	21 December, 1899.
Feldwick, the Hon. Henry	Otago.	15 October, 1892.*
Fraser, the Hon. Francis Humphris ..	Wellington.	22 June, 1899.
Gourley, the Hon. Hugh	Dunedin.	22 June, 1899.
Grace, the Hon. Morgan Stanislaus, C.M.G	Wellington.	13 May, 1870.†
Harris, the Hon. Benjamin	Auckland.	3 February, 1897.
Holmes, the Hon. Mathew	Otago.	19 June, 1866.†
Jenkinson, the Hon. John Edward ..	Canterbury.	6 June, 1893.‡
Jennings, the Hon. William Thomas ..	Auckland.	15 October, 1892.*
Johnston, the Hon. Charles John ..	Wellington.	20 January, 1891.†
Jones, the Hon. George	Otago.	13 December, 1895.
Kelly, the Hon. Thomas	Taranaki.	15 October, 1892.*
Kelly, the Hon. William	Auckland.	3 February, 1897.
Kenny, the Hon. Courtney William Aylmer Thomas	Marlborough.	15 May, 1885.†
Kerr, the Hon. James	Westland.	15 October, 1892.*
Louisson, the Hon. Charles	Canterbury.	22 December, 1900.
McKenzie, the Hon. Sir John, K.C.M.G.	Otago.	17 May, 1901.
McLean, the Hon. George	Otago.	19 December, 1881.†
Miller, the Hon. Sir Henry John, Kt. (Speaker)	Otago.	8 July, 1865.†
Montgomery, the Hon. William.. ..	Canterbury.	15 October, 1892.*
Morris, the Hon. George Bentham ..	Auckland.	15 May, 1885.†
Ormond, the Hon. John Davies ..	Hawke's Bay.	20 January, 1891.†
Peacock, the Hon. John Thomas ...	Canterbury.	9 October, 1877.†
Pinkerton, the Hon. David	Otago.	3 February, 1897.
Pitt, the Hon. Albert, Lieut.-Colonel ..	Nelson.	23 December, 1899.
Reeves, the Hon. Richard Harman Jeffares	Nelson.	13 December, 1895.
Rigg, the Hon. John	Wellington.	6 June, 1893.‡
Scotland, the Hon. Henry	Taranaki.	24 February, 1868.†
Shrimski, the Hon. Samuel Edward ..	Otago.	15 May, 1885.†
Smith, the Hon. Alfred Lee	Otago.	18 June, 1898.
Smith, the Hon. William Cowper ..	Hawke's Bay.	13 December. 1895.
Stevens, the Hon. Edward Cephas John..	Canterbury.	7 March, 1882.†
Swanson, the Hon. William	Auckland.	15 May, 1885.†
Taiaroa, the Hon. Hori Kerei	Otago.	15 May, 1885.†
Tomoana, the Hon. Henare	Hawke's Bay.	24 June, 1898.
Twomey, the Hon. Jeremiah Matthew ..	Canterbury.	18 June, 1898.
Walker, the Hon. Lancelot	Canterbury.	15 May, 1885.†

* Reappointed, 16th October, 1899. † Life members. ‡ Reappointed, 6th June, 1900.

ROLL OF MEMBERS OF THE LEGISLATIVE COUNCIL—*continued.*

Name.	Provincial District.	Date of Appointment.
Walker, the Hon. William Campbell, C.M.G.	Canterbury ..	15 October, 1892.*
Whitmore, the Hon. Sir George Stoddart, K.C.M.G.	Hawke's Bay	31 August, 1863. †
Williams, the Hon. Henry	Auckland ..	7 March, 1882.†

* Reappointed, 14th October, 1899. † Life Member.

Clerk of Parliaments, Clerk of the Legislative Council, and Examiner of Standing Orders upon Private Bills—Leonard Stowe.

Clerk-Assistant—Arthur Thomas Bothamley.

Second Clerk-Assistant—George Moore.

Interpreter—Henry S. Hadfield.

HOUSE OF REPRESENTATIVES.

The number of members constituting the House of Representatives is seventy-four—seventy Europeans and four Maoris.‡ This number was fixed by the Act of 1887, which came for the first time into practical operation at the general election of 1890. Previously (from 1881) the House consisted of ninety-five members—ninety-one Europeans and four Maoris. The North Island at present returns thirty-four European members, and the Middle Island thirty-six. The Cities of Auckland, Wellington, Christchurch, and Dunedin return each three members, and all other electoral districts one each. The elections are triennial, except in the case of a dissolution by the Governor. Every registered elector, being of the male sex, and free from any of the disqualifications mentioned in section 8 of "The Electoral Act, 1893," is eligible for membership. All contractors to the public service of New Zealand to whom any public money above the sum of £50 is payable, directly or indirectly, in any one financial year, as well as the Civil servants of the colony, are incapable of being elected as, or of sitting or voting as, members. The payment made to members of the House of Representatives is £20 per month, amounting to £240 per annum. £2 for every sitting-day exceeding five is deducted on account of absence during session not due to sickness or other unavoidable cause. Travelling-expenses to and from Wellington are also allowed. This scale of payment came into force on the 1st January, 1893, under the provisions of "The Payment of Members Act, 1892." Twenty members, inclusive of the Speaker, constitute a quorum. Unless otherwise ordered, the sitting-days of the House are Tuesdays, Wednesdays, Thursdays, and Fridays, from 2.30 p.m. to 5.30 p.m., resuming at 7.30 p.m. Order of admission to the Speaker's Gallery is by ticket obtained from the Speaker. The Strangers' Gallery is open free to the public.

‡ See foot-note on page 16, *ante*.

Roll of Members of the House of Representatives.

(8th July, 1901).

Speaker—The Hon. Sir George Maurice O'Rorke, Kt. Bach.

Chairman of Committees—Arthur Robert Guinness.

Name.	Electoral District.	Date of Notification of Return of Writ.
For European Electorates.		
Allen, Edmund Giblett	Waikouaiti.	27 December, 1899.
Allen, James	Bruce.	"
Arnold, James Frederick ..	City of Dunedin.	"
Atkinson, Arthur Richmond ..	City of Wellington.	"
Barclay, Alfred Richard	City of Dunedin.	"
Bennet, James	Tuapeka.	"
Bollard, John	Eden.	"
Buddo, David	Kaiapoi.	"
Carncross, Walter Charles Frederick	Taieri.	"
Carroll, Hon. James	Waiapu.	"
Collins, William Whitehouse ..	City of Christchurch.	"
Colvin, James	Buller.	"
Duncan, Hon. Thomas Young ..	Oamaru.	"
Ell, Henry George	City of Christchurch	"
Field, William Hughes	Otaki.	11 January, 1900.
Fisher, George	City of Wellington.	27 December, 1899.
Flatman, Frederick Robert ..	Geraldine.	"
Fowlds, George	City of Auckland.	"
Fraser, Alfred Levavasour Durell ..	Napier.	"
Fraser, William	Wakatipu.	"
Gilfedder, Michael	Wallace.	"
Graham, John	City of Nelson.	"
Guinness, Arthur Robert	Grey.	"
Hall, Charles	Waipawa.	"
Hall-Jones, Hon. William ..	Timaru.	"
Hanan, Josiah Alfred	Invercargill.	"
Hardy, Charles Albert Creery ..	Selwyn.	"
Herries, William Herbert ..	Bay of Plenty.	"
Hogg, Alexander Wilson ..	Masterton.	"
Hornsby, John Thomas Marryat ..	Wairarapa.	"
Houston, Robert Morrow ..	Bay of Islands.	"
Hutcheson, John	City of Wellington.	"
———	Patea.	"
Lang, Frederic William	Waikato.	"
Laurenson, George	Lyttelton.	"
Lawry, Frank	Parnell.	"
Lethbridge, Frank Yates ..	Rangitikei.	"
———	City of Christchurch.	"
Mackenzie, Thomas	Waihemo.	23 July, 1900.
McGowan, Hon. James	Thames.	27 December, 1899.
McGuire, Felix	Hawera.	"
McKenzie, Roderick	Motueka.	"
McLachlan, John	Ashburton,	"
McNab, Robert	Mataura.	"
Massey, William Ferguson ..	Franklin.	"
Meredith, Richard	Ashley.	"

ROLL OF MEMBERS OF THE HOUSE OF REPRESENTATIVES—*continued.*

Name.	Electoral District.	Date of Notification of Return of Writ.
For European Electorates—contd.		
Millar, John Andrew	City of Dunedin.	27 December, 1899.
Mills, Hon. Charles Houghton ..	Wairau.	"
Monk, Richard	Waitemata.	"
Morrison, Arthur	Caversham.	"
Napier, William Joseph	City of Auckland.	"
O'Meara, John	Pahiatua.	"
O'Rorke, Hon. Sir George Maurice, Kt. Bach.	Manukau.	"
Palmer, Jackson	Ohinemuri.	"
Pirani, Frederick	Palmerston.	"
Rhodes, Robert Heaton	Ellesmere.	"
Russell, George Warren	Riccarton.	"
Russell, William Russell ..	Hawke's Bay.	"
Seddon, Rt. Hon. Richard John, P.C.	Westland.	"
Smith, Edward Metcalf	Taranaki.	"
Stevens, John	Manawatu.	"
Steward, Hon. William Jukes ..	Waitaki.	"
Symes, Walter	Egmont.	"
Tanner, William Wilcox.. ..	Avon.	"
Thompson, Robert	Marsden	"
Thomson, James William ..	Clutha.	"
Ward, Hon. Sir Joseph George, K.C.M.G.	Awarua.	"
Wilford, Thomas Mason	Suburbs of Well'gton	"
Willis, Archibald Dudingston ..	Wanganui.	"
Witheford, Joseph Howard ..	City of Auckland.	8 May, 1900.
For Maori Electorates.		*Day of Election.*
Heke, Hone	Northern Maori.	9 January, 1901.*
Kaihau, Henare	Western Maori.	19 December, 1899.
Parata, Tame	Southern Maori.	"
Pere, Wi	Eastern Maori	"

Clerk of House of Representatives—H. Otterson.
Clerk-Assistant—A. J. Rutherfurd.
Second Clerk-Assistant—A. F. Lowe.
Sergeant-at-Arms—W. Fraser.
Reader and Clerk of Bills and Papers—E. W. Kane.
Chief *Hansard* Reporter—Silas Spragg.
Interpreters—L. M. Grace, W. E. Goff.
Clerk of Writs—H. Pollen.
Deputy Clerk of Writs— ————.
Librarian—Charles Wilson.

* Writ indorsed, 31st January, 1901.

OFFICIAL LIST.

[17th May, 1901.]

PREMIER'S OFFICE.

Premier—Rt. Hon. R. J. Seddon, P.C.
Secretary to Cabinet—A. J. Willis

COLONIAL SECRETARY'S DEPARTMENT.

Chief Office.

Colonial Secretary—Hon. J. G. Ward
Under-Secretary—Hugh Pollen
Chief Clerk—R. F. Lynch
Clerks—J. F. Andrews, L. W. Loveday
Officer in Charge of Government Buildings—W. H. Hennah

Audit Office.

Controller and Auditor-General—J. K. Warburton.
Assistant Controller and Auditor—J. C. Gavin
Chief Clerk—L. C. Roskruge
Clerks—W. Dodd, H. S. Pollen, W. G. Holdsworth, E. J. A. Stevenson, C. M. Georgeson, J. H. Fowler, J. Skerrett, R. A. Gray
Cadets—C. E. Easton, G. V. Bogle
Cadette—E. A. Casey
Extra Clerks—D. C. Innes, J. Swift, A. E. Bybles, J. Ward, C. E. Briggs, E. E. Smythe, J. McC. Hamilton, T. S. Hamer
Audit Officer, Agent-General's Office, London—C. F. W. Palliser
Audit Inspectors—P. P. Webb, A. H. Maclean, J. King, A. W. Eames, G. H. I. Easton, C. P. Johnson, J. T. Dumbell, W. H. Carlyle, H. A. Lamb, B. A. Meek, A. A. Bethune

Registrar-General's Office.

Registrar-General—E. J. Von Dadelszen
Chief Clerk and Deputy Registrar-General—G. Drury
Clerks—F. H. Machattie, W. W. Cook, Ben Keys
Index Clerk—S. Coffey

Registrars of Births, Deaths, and Marriages.

Four Chief Towns.

Auckland—E. H. Lyons
Wellington—F. W. Mansfield
Christchurch—J. W. Parkerson
Dunedin—W. J. Hall

Printing and Stationery Department.

Government Printer, Stationery Office Manager, and Controller of Stamp Printing—John Mackay
Superintending Overseer—J. Burns
Chief Clerk and Accountant—B. B. Allen
Clerk and Computer—N. B. K. Manley
Clerks—F. Barraud, J. W. Hall, R. Watts, A. Stace, A. Williams
Cadette—A. Paterson
Hansard Supervisor—M. F. Marks
Overseers—J. J. Gamble, B. Wilson
Sub-overseer, Jobbing-room—G. Tattle
Overseer, Machine-room—J. Phillips
Overseer, Binding Branch—W. Franklin
Sub-overseer, Binding Branch—G. H. Broad
Night Foreman—J. F. Rogers
Stamp Printer—H. Hume
Stereotyper and Electrotyper—W. J. Kirk
Readers—W. Fuller, H. S. Mountier
Forewoman, Binding Branch—Miss O'Malley
Engineer—T. R. Barrer

COLONIAL TREASURER'S DEPARTMENT.

Chief Office.

Colonial Treasurer—Rt. Hon. R. J. Seddon, P.C.
Secretary to the Treasury, Receiver-General, Paymaster-General, and Registrar of New Zealand Consols—James B. Heywood
Accountant to the Treasury—Robert J. Collins

Cashier—C. E. Chittey
Corresponding Clerk—H. Blundell
Clerks—C. Meacham, R. B. Vincent, W. E. Cooper, E. L. Mowbray, A. O. Gibbes, J. Holmes, J. Eman Smith, H. N. W. Church, J. Radcliffe, A. J. Morgan, T. J. Davis, F. H. Tuckey, W. Wilson
Cadets—G. A. Fraser, E. J. Fitzgibbon, W. Gillanders, O. V. Gillespie, J. Christie
Cadettes—L. McIntosh, E. Fisher, R. Macky
Officer for Payment of Imperial Pensions at Auckland—B. J. Daveney

FRIENDLY SOCIETIES' AND TRADE UNIONS' REGISTRY OFFICE.

Registrar—E. Mason
Revising Barrister—L. G. Reid
Clerk—C. T. Benzoni

OLD-AGE PENSIONS OFFICE.

Registrar—E. Mason
Deputy Registrars—
Auckland—John King, Registrar of Electors
Wellington—F. W. Mansfield, Registrar of Births, &c.
Christchurch—L. C. Williams, Registrar of Electors
Dunedin—James Taylor, Deputy Registrar of Births, &c.
(In all other Pension Districts Clerks of the Magistrates' Courts are the Deputy Registrars)

LAND AND INCOME TAX DEPARTMENT.

Commissioner—John McGowan
Deputy Commissioner—G. F. C. Campbell
Chief Clerk—F. J. M. D. Walmsley
Accountant—P. Heyes
Clerks—A. J. McGowan, H. Nancarrow, J. M. King, W. M. Tyers, J. W. Black, C. V. Kreeft, G. W. Jänisch, D. R. Purdie, D. G. Clark, J. Stevenson, J. R. Smyth, E. Randell, R. Hepworth, S. Ruddock, J. Ferguson
Cadets—E. Panting, C. E. J. Dowland, H. A. Anderson, C. J. Lovatt

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DEPARTMENT OF JUSTICE.

HEAD OFFICE.

Minister of Justice—Hon. Jas. McGowan
Under-Secretary—F. Waldegrave
Translator—G. H. Davies
Chief Clerk—C. B. Jordan
Clerks—C. E. Matthews, G. F. Dixon, A. Thompson

CROWN LAW OFFICE.

Attorney-General—(vacant)
Solicitor-General—F. Fitchett, M.A., LL.D.
Assistant Law Officer—L. G. Reid
Law Draftsman—
Clerk—E. Y. Redward

PATENT OFFICE.

Registrar of Patents, Designs, and Trade-marks—F. Waldegrave
Deputy Registrar—J. C. Lewis
Clerks—W. J. Organ, Mary Eyre

JUDICIAL.

Supreme Court Judges.

Chief Justice—
Wellington—Sir R. Stout, K.C.M.G.
Puisne Judges—
Wellington—W. B. Edwards, Theo. Cooper
Auckland—E. T. Conolly
Christchurch—J. E. Denniston
Dunedin—J. S. Williams

District Court Judges.

Wairarapa, Wanganui, New Plymouth, Hawera, and Palmerston North—C. C. Kettle
Nelson—H. W. Robinson
Ashburton, Timaru, Oamaru, Queenstown, Naseby, Lawrence, Invercargill, Hokitika, Greymouth, Westport, Reefton, and Kumara—C. D. R. Ward

Registrars of the Supreme Court.

Auckland—H. C. Brewer
New Plymouth—R. L. Stanford
Wanganui—C. C. Kettle
Napier—A. Turnbull
Gisborne—W. A. Barton
Wellington—D. G. A. Cooper
Nelson—H. W. Robinson
Blenheim—J. Allen
Christchurch—A. R. Bloxam
Hokitika—V. G. Day
Dunedin—C. McK. Gordon
Invercargill—W. Wyinks

Sheriffs.

Auckland—H. C. Brewer
Taranaki—A. H. Holmes
Hawke's Bay—A. Turnbull
Poverty Bay—W. A. Barton

Wellington—D. G. A. Cooper
Wairarapa—E. Rawson
Wanganui and Rangitikei—C. A. Barton
Nelson—W. Heaps
Westland North—E. C. Kelling
Central Westland—H. Lucas
Marlborough—J. B. Stoney
Canterbury—A. R. Bloxam
Timaru—C. A. Wray
Westland—V. G. Day
Otago—C. McK. Gordon
Southland—J. R. Colyer

Crown Solicitors.

Auckland—Hon. J. A. Tole
New Plymouth—A. Standish
Gisborne—J. W. Nolan
Napier—A. J. Cotterill
Wellington—H. Gully
Wanganui—S. T. Fitzherbert
Nelson—C. Y. Fell
Blenheim—R. McCallum
Christchurch—T. W. Stringer
Timaru—J. W. White
Dunedin—J. F. M. Fraser
Invercargill—T. M. Macdonald
Oamaru—A. G. Creagh

Crown Prosecutors (District Courts).

New Plymouth—A. Standish
Hawera—E. L. Barton
Wanganui and Palmerston North—S. T. Fitzherbert
Masterton—A. R. Bunny
Nelson—C. Y. Fell
Westport and Reefton—C. E. Harden
Hokitika—J. Park
Greymouth—M. Hannan
Timaru—J. W. White
Oamaru—A. G. Creagh
Queenstown—Wesley Turton
Invercargill—T. M. Macdonald

Stipendiary Magistrates.

Auckland—H. W. Brabant
Pokeno, Waikato, &c.—H. W. Northcroft
Onehunga, &c.—T. Hutchison*
Russell, &c.—E. C. Blomfield
Tauranga, &c.—J. M. Roberts*
Thames, &c.—R. S. Bush*
Gisborne, &c.—W. A. Barton
New Plymouth—R. L. Stanford
Hawera, &c.—H. Eyre-Kenny
Wanganui, &c.—C. C. Kettle
Palmerston North, &c.—A. Greenfield
Wellington, &c.—W. R. Haselden
Wairarapa, &c.—W. P. James
Napier &c.—A. Turnbull
Nelson—H. W. Robinson*
Motueka, Collingwood, &c. — Wilson Heaps*
Blenheim, &c.—J. Allen*
Christchurch, &c.—R. Beetham
Kaiapoi, &c.—H. W. Bishop
Timaru, &c.—C. A. Wray
Greymouth, Westport, &c. — R. S Hawkins*
Hokitika, &c.—D. Macfarlane*
Dunedin, &c.—E. H. Carew* and C. C. Graham
Oamaru, &c.—J. Keddell*
Milton, &c.—H. A. Stratford*
Clyde, &c.—F. J. Burgess*
Naseby—J. McEnnis*
Invercargill, &c.—S. E. McCarthy*
Chatham Islands—R. S. Florance

Official Assignees in Bankruptcy.

Auckland—J. Lawson, J.P.
Wellington—J. Ashcroft, J.P.
Christchurch—G. L. Greenwood
Dunedin—C. C. Graham, S.M.

Clerks of District and Magistrates' Courts.

New Plymouth—A. H. Holmes
Hawera—A. Trimble
Wanganui—C. A. Barton
Palmerston North—W. Matravers
Masterton—E. Rawson
Nelson—C. H. Webb-Bowen
Hokitika—A. A. Mair
Kumara—T. M. Lawlor
Greymouth—B. Harper
Westport—E. C. Kelling
Reefton—H. Lucas
Timaru—T. Howley
Ashburton—T. W. Tayler
Oamaru—R. P. Ward
Invercargill—J. R. Colyer
Queenstown—
Lawrence—A. M. Eyes
Naseby—F. Hart

Receivers of Gold Revenue, Mining Registrars, and Clerks of Wardens' and Magistrates' Courts.

Thames—J. Jordan
Coromandel—D. Banks
Paeroa—T. A. Moresby
Te Aroha—E. W. Cave
Tauranga—W. A. Thom
Whangarei—G. M. Robertshaw
Havelock (Marlborough)—H. McArdle

* Are also Wardens of Goldfields.

Nelson—C. H. Webb-Bowen
Blenheim—John Terry
Motueka—H. E. Gilbert
Collingwood—W. Seale
Westport—E. C. Kelling
Charleston—T. A. Godfrey
Reefton—H. Lucas
Ahaura—A. Askenbeck
Greymouth—B. Harper
Kumara—T. M. Lawlor
Hokitika—A. A. Mair
Naseby, &c.—F. Hart
Wyndham—D. Bogue
Clyde, Black's, and Alexandra—F. T. D. Jeffrey
Cromwell—J. Fleming
Queenstown and Arrowtown—
Lawrence—A. M. Eyes
Riverton—A. G. Ashby

Clerks of Magistrates' Courts.

Auckland—H. G. Ralfe
Gisborne—G. J. Johnstone
Hamilton—T. Kirk
Napier—R. B. Mathias
Hastings—P. Skerrett
Stratford—J. B. Stoney
Marton, &c.—F. M. Deighton
Wellington—A. D. Thomson
Christchurch—W. Martin
Lyttelton—W. Shanaghan
Kaiapoi—M. Lynskey
Dunedin—W. G. P. O'Callaghan

NATIVE LAND COURT.

Chief Judge—G. B. Davy
Judges—A. Mackay, D. Scannell, H. W. Brabant, W. J. Butler, H. F. Edger, W. G. Mair, H. D. Johnson, J. M. Batham
Registrars—Auckland, J. W. Browne; Gisborne, J. Brooking; Wellington, R. C. Sim

Commissioners of the Native Land Court.

R. S. Bush, J. Booth, A. Turnbull, E. C. Blomfield, C. C. Kettle, J. M. Roberts, W. Stuart, H. W. Bishop, E. H. Carew, H. E. Kenny, R. L. Stanford, T. Hutchison, H. W. Robinson, R. S. Florance: Sub-Commissioners—J. Brooking, W. A. Thom
Government Native Agent, Otorohanga—G. T. Wilkinson

VALIDATION COURT.

Chief Judge—G. B. Davy
Judges—The Judges of the Native Land Court
Registrars—The Registrars of the Native Land Court

CORONERS.

Coroners—Auckland, A. McArthur, E. Baker, T. Gresham; Coromandel, A. R. H. Swindley; Collingwood, E. Davidson; Foxton, E. S. Thynne; Hamilton, J. S. Bond; Hawera, C. E. Major; Hokitika, R. W. Wade; Marton, A. Ross; Ohakana, Ohiwa, S. Bates; Otahuhu, S. Luke; Otaki, W. H. Simcox; Paeroa, W. Forrest; Pahi, J. B. Ariell; Palmerston North, G. M. Snelson; Port Albert, L. P. Becroft; Queenstown, L. Hotop; Raglan, W. H. Wallis; Midhirst, J. Mackay; Thames, A. Bruce; Tauranga, A. C. H. Tovey; Te Awamutu, J. B. Teasdale; Te Kopuru, T. Webb; Waimate, E. M. Williams; Waipawa, S. Johnson: Wellington, J. Ashcroft; Whangarei, J. M. Killen; Woodville, E. J. Gothard. All Stipendiary Magistrates are *ex officio* Coroners.

NEW ZEALAND POLICE FORCE.

Head Office.

Commissioner—John Bennett Tunbridge
Clerks—John Evans, John Tasker, William John Mahoney
Cadet—Walter Gollan

Police Department.

Inspectors—Peter Pender, William Stone Pardy, John Cullen, John Wybrant Ellison, Robert James Gillies, Terence O'Brien, Ewen Macdonell
Sub-Inspectors—Nicholas Kiely, Edward Wilson, Alfred James Mitchell, Patrick Black

PRISONS DEPARTMENT.

Inspector—Lieut.-Colonel Arthur Hume, N.Z.M.
Clerk—T. E. Richardson
Gaolers—Auckland, Francis Egerton Severne, Dunedin, Samuel Charles Phillips; Hokitika, Thomas Rosson Pointon, Invercargill, John Henry Bratby; Lyttelton, Matthew Michael Cleary; Napier, Michael Flannery; New Plymouth, Bartholomew Lloyd O'Brien; Wanganui, Robert T. N. Beasley; Wellington, Patrick Samuel Garvey

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DEPARTMENT OF INDUSTRIES AND COMMERCE.

Minister—Hon. J. G. Ward
Secretary—T. E. Donne

DEPARTMENT OF TOURIST AND HEALTH RESORTS.

Minister—Hon. J. G. Ward
Superintendent—T. E. Donne

DEPARTMENT OF LABOUR.

Minister of Labour—Rt. Hon. R. J. Seddon, P.C.
Secretary for Labour and Chief Inspector of Factories—E. Tregear
Chief Clerk—James Mackay
Clerks—F. Rowley, F. A. de la Mare
Shorthand Writer and Typist—J. W. Collins

Inspectors of Factories.

North Island — J. Mackay, J. Shanaghan, H. Ferguson, L. D. Browett, W. J. Blake, Margaret Hawthorne, and 71 local Inspectors
South Island—J. Mackay, J. Shanaghan, J. Lomas, H. Maxwell, J. B. Lindsay, Margaret Hawthorne, and 68 local Inspectors
(There are also 200 Bureau Agents in different parts of the colony.)

PUBLIC WORKS DEPARTMENT.

Head Office.

Minister for Public Works—Hon. W. Hall-Jones
Under-Secretary—H. J. H. Blow
Engineer-in-Chief—W. H. Hales
Superintending Engineer—P. S. Hay, M.A., M.Inst.C.E.
Chief Clerk—W. D. Dumbell
Accountant—G. J. Clapham
Land-purchase Officer—H. Thompson
Record Clerk—H. W. H. Millais
Clerks—W. Black, C. T. Rushbrook, E. McCarthy, A. Biddell, P. S. Waldie, E. Bold, N. Jacobs, A. H. Kimbell, H. F. Curtis, T. Oppler, P. J. Garvey, G. C. Schmidt, A. L. Goldfinch, L. White
Chief Draughtsman—W. G. Rutherford
Architect—J. Campbell
Draughtsmen—T. Perham, E. Jackson, A. Koch, C. F. Napper, W. Withers, W. G. Swan, J. H. Price, G. Bjornstad, C. A. Lawrence, L. L. Richards, A. E. King, R. G. Applegarth, J. J. Fraser, G. W. Phillips, A. F. Macrae, J. Baird, S. T. Silver
Head Storekeeper—John Young
Engineering Cadets—F. S. Dyson, J. Wood, L. B. Campbell
Clerical Cadet—A. D. Park
Clerical Cadette—E. M. B. Lynch

District Offices.

District Engineers—Auckland, C. R. Vickerman; Dunedin, E. R. Ussher, M.Inst.C.E.
Resident Engineers—Hunterville, G. L. Cook, M.Inst.C.E.; North Island Main Trunk Railway, J. A. Wilson; Wellington, R. W. Holmes, M.Inst.C.E.; Westport, R. A. Young, Assoc.M.Inst. C.E.; Greymouth, J. Thomson, B.E.; Springfield, W. H. Gavin; Dunedin, W. A. Shain
Assistant Engineers—J. D. Louch, J. J. Hay, M.A.; J. S. Stewart, S. J. Harding, J. H. Dobson, F. M. Hewson, A. E. Barrowclough, F. H. Geisow, C. E. Armstrong, J. H. Lewis, A. Jack, H. R. Atkinson, E. Combes, G. C. McGlashan, A. Ross, J. V. Haskell, H. Dickson, J. W. E. McEnnis, J. W. Thomson, F. W. Furkert, J. Meenan, W. A. Jeff, W. Sherratt
Engineering Cadets—C. J. McKenzie, F. P. Bartley, J. J. Wilson, H. Vickerman
Draughtsmen—C. Wood, W. A. Cumming, P. F. M. Burrows, J. P. Vibert, W. H. Hislop, T. J. McCosker, J. B. Robertson, A. Courtis
Clerks—A. S. Lewis, A. R. Stone, J. H. Denton, E. Waddell, J. B. Borton, L. P. Cabot, F. E. Banks, H. Grave, H. B. Burnett, G. T. Grace, E. G. Beale, E. Crouch, W. E. Fitzgerald, L. M. Shera, H. M. O'Donnell
Storekeepers—T. Douglas, J. C. Fulton, G. Glenister, C. Scholfield

RAILWAYS DEPARTMENT.

Minister for Railways—Hon. J. G. Ward
General Manager—T. Ronayne
Assistant General Manager—C. Hudson
Chief Clerk—T. W. Waite
Clerks—R. W. McVilly, E. J. Andrews, G. Brownlee, B. M. Wilson, W. S. Ridler, W. Johnston, J. Hislop, H. P. West, J. E. Widdop, W. H. Gifford, S. Murchie, A. J. Will, J. F. Westmoreland, W. H. Warren, J. D. Nash, W. H. B. Donovan
Audit Inspectors—H. Baxter, D. Munro, R. Hislop, jun.
Railway Accountant—A. C. Fife

Clerks—H. Davidson, J. H. Davies, G. G. Wilson, M. C. Rowe, S. P. Curtis, J. McLean, E. Davy, A. Morris, C. Batten, W. B. Fisher, J. Firth, E. J. Fleming, H. H. Leopard, R. J. Loe, W. Bourke, A. J. Belworthy, F. W. Lash, A. H. Hunt, W. E. Ahern, F. K. Porteous, T. A. O'Connor, J. W. Dayman, W. H. Simmons, J. B. Gauntlett, T. D. H. Hall

Stores Manager—G. Felton

Clerks—A. M. Heaton, F. J. Dawes, G. H. Norie, C. F. F. A. R. Isherwood, G. Bennett, S. Alpe, H. W. Barbor, E. J. Maguiness, R. P. Bray, J. T. Bain, L. B. Archibald, E. J. Scanlan, S. J. H. Dyer, J. R. Robertson, A. D. Lincoln, J. Kerr, J. Brabiner, J. Hayes, E. Goldfinch

Traffic Superintendents—Wellington, A. Grant; Dunedin, W. H. Gaw

District Managers—Kaihu, E. E. Gillon; Auckland, H. Buxton; Wanganui, C. A. Piper; Greymouth, W. Crombie; Christchurch, T. Arthur; Invercargill, S. F. Whitcombe

Stationmasters in charge—Kawakawa, R. B. Peat; Whangarei, J. T. Parsons, Westport, T. Hay-Mackenzie; Nelson, E. G. Wilson; Picton, T. S. Edwards

Chief Engineer for Working Railways—J. Coom, M.Inst.C.E.

Inspecting Engineer—J. Burnett, M.Inst. C.E.

Signal Engineer—H.J.Wynne, A.M.Inst. C.E.

Railway Land Officer—E. G. H. Mainwaring

Chief Draughtsman—G. A. Troup

Draughtsmen—J. Besant, A. H. Alabaster, W. R. B. Bagge, C. T. Jeffreys, Ad. Howitt, L. Reynolds, A. S. Henderson, W. W. Fry, W. R. Davidson, J. R. Mullan

Clerks—W. P. Hicks, M. Angus, J. T. Ford, W. A. Mirams, H. Jessup, T. H. Wilson, E. S. Kelly, H. W. Rowden, T. M. Lucy, H. H. Gardner, P. J. McGovern, E. D. Richards, A. N. Longton, G. P. Parrell, E. J. Wiseman, A. L Baumgart, T. Trezise, H. McAlister

District Engineers—Auckland, C. H. Biss; Wanganui, D. T. McIntosh; Wellington, A. C. Koch; Westport, G. E. Richardson; Greymouth, H. St. J. Christophers; Christchurch, H. Macandrew; Dunedin, F. W. MacLean; Invercargill, A. J. McCredie

Locomotive Superintendent—A. L. Beattie

Clerks—J. P. Kelly, R. Aekins, P. A. Buck, D. D. Weir, C. G. Edwards, J. Rumgay, W. J. Stringer, W. A. Wellings, C. H. Virtue, H. McKeowen, H. B. Sturmer, G. H. Reynolds, N. P. G. Ewart, C. L. Pettit, A. Beaton, E. Hagenson, L. K. McMurrich, E. J. Flowerday, A. A. B. Boult, J. H. Leopard, J. P. McKeowen

Chief Draughtsman—G. A. Pearson

Draughtsmen—R. Pye-Smith, J. M. Porteous

Relieving Officer—F. T. Murison

Boiler Inspector—J. W. Nichols

Locomotive Engineers—Auckland, A. V. Macdonald; Wellington-Napier-New Plymouth, T. A. Peterkin; Hurunui-Bluff, H. H. Jackson; Relieving, J. D. Harris. Brake Engineer—J. H. Fox

Board of Appeal.

North Island.

H. Eyre Kenny, Stipendiary Magistrate, Chairman, appointed by the Governor.

H. Davidson, Railway Accountant's Office, elected.

T. Wilson, Engineman, elected

Middle Island.

C. D. R. Ward, District Judge, Chairman, appointed by the Governor.

T. W. Brebner, Stationmaster, elected.

P. E. Nolan, Signalman, elected.

POST AND TELEGRAPH DEPARTMENT.

General Post Office.

Postmaster-General and Electric Telegraph Commissioner—Hon. J. G. Ward

Secretary—W. Gray

Superintendent of Electric Lines—J. K. Logan

Assistant Secretary and Inspector—T. Rose

Controller of Money-orders and Savings-banks, and Accountant—G. Gray

Chief Clerk—D. Robertson

Assistant Accountant—W. R. Morris

Clerks, Secretary's Office—F. V. Waters, H. Plimmer, J. C. Williamson, W. Crow, B. C. Dean, V. J. Brogan, H. D. Grocott, J. C. Redmond, A. T. Markmann, W. J. Gow, F. W. Furby, R. A. Keenan, J. L. Murphy, J. P. P. Clouston

Mail Agents—A. P. Dryden, W. Isbister
Clerks, Inspector's Branch—G. V. Hudson, J. Brennan, W. A. Tanner, F. S. Robins, S. M. Harrison, A. S. Harper
Clerks, Accountant's Branch—J. L. H. Ledger, H. A. R. Huggins, G. W. Moorhouse, W. Callaghan, W. Chegwidden, R. J. Thompson, H. Cornwall, F. Perrin, J. J. Esson, R. E. Hayes, D. A. Jenkins, E. Fitzsimons, H. N. McLeod, J. D. Avery, C. B. Harton, W. J. Drake, C. Dempsey, H. A. Smith, J. G. Roache, J. Coyle, F. W. Faber, F. E. Beamish, P. J. Kelleher, G. H. Harris, H. C. Milne, C. W. J. Panting, H. C. Hickson, P. D. Hoskins, W. R. Wakelin, F. Stewart, T. W. West, G. G. Rose, T. F. Withers, T. E. Diamond, J. B. Jordan, H. E. Combs, J. E. Hull, A. Marshall, F. G. A. Eagles, C. G. Collins, T. M. Highet, E. C. Gamble, E. Bermingham, C. Bermingham, S. Brock, E. Harris, I. Johnston, B. M. Kenny, V. Johnston, M. A. McLeod, C. Smith, M. A. Asquith
Electrician and Inspector—W. S. Furby
Assistant Electrician—T. Buckley
Mechanicians—R. Heinitz, F. Palmer, M. D. Joyce
Storekeeper—J. Black
Assistant Storekeeper—C. B. Mann
Clerks in Store—C. Nicholls, T. Palmer, W. H. Carter, M. McGilvray, J. G. Howard

Chief Postmasters.

Auckland—S. B. Biss
*Thames—J. E. Coney
*Gisborne—G. W. Sampson
Napier—D. Cumming
*New Plymouth—F. D. Holdsworth
*Wanganui—J. F. McBeth
Wellington—S. J. Jago
*Blenheim—J. Bull
*Nelson—H. Calders
*Westport—W. St. G. Douglas
*Greymouth—C. J. Berry
*Hokitika—J. H. Sheath
Christchurch—R. Kirton
*Timaru—J. A. Hutton
*Oamaru—W. W. Beswick
Dunedin—E. Cook
*Invercargill—J. W. Wilkin

Inspectors of Telegraphs.

Auckland—W. G. Meddings
Christchurch—J. W. Gannaway
Dunedin—J. Orchiston
Nelson—C. C. Robertson

Assistant Inspectors of Post-offices.

D. Miller (Northern District), S. P. Stevens (Midland District), C. J. A. H. Tipping (Southern District)

Officers in Charge of Telegraph Offices.

Auckland—H. F. Seager
Napier—B. H. Keys
Wellington—H. W. Harrington
Christchurch—J. W. Mason
Dunedin—J. G. Ballard

Board of Appeal.

J. McGowan, Commissioner of Taxes, Chairman (by Act).
J. K. Logan, Superintendent of Electric Lines (by Act).
J. H. Stevens, Representing Postal Branch, elected.
H. G. Greatbatch, Representing Telegraph Branch, elected.

DEPARTMENT OF TRADE AND CUSTOMS.

Commissioner of Trade and Customs—Hon. C. H. Mills
Secretary and Inspector of Customs and Secretary of Marine—W. T. Glasgow.
Chief Clerk—T. Larchin
Clerks, Customs—V. R. Meredith, C. H. Manson
Cadets—L. J. Thompson, W. A. Cameron
Audit—H. W. Brewer, H. Crowther (Writer)

Collectors of Customs.

Auckland—A. Rose
Poverty Bay—E. Pasley
New Plymouth—H. Bedford
Napier—E. R. C. Bowen
Wellington—D. McKellar
Wanganui—A. Elliott
Wairau—W. J. Hawley
Nelson—W. Heaps
Westport—J. Mills
Greymouth—A. McDowell
Hokitika—J. P. Ridings
Lyttelton and Christchurch—E. Patten

*Combined post- and telegraph-offices.

Timaru—A. Hart
Oamaru—T. M. Cullen
Dunedin—C. W. S. Chamberlain
Invercargill and Bluff Harbour—D. Johnston, jun.

OFFICERS IN CHARGE OF PORTS, AND COASTWAITERS.

Thames—T. C. Bayldon, Coastwaiter
Russell—H. Stephenson, Coastwaiter
Tauranga—E. Northcroft, Officer in Charge
Whangaroa—A. G. Ratcliffe, Coastwaiter
Whangarei—J. Munro, Coastwaiter
Mongonui—A. D. Clemett, Officer in Charge
Hokianga—G. Martin, Coastwaiter
Kaipara—J. C. Smith, Officer in Charge
Waitara—J. Cameron, Coastwaiter
Foxton—T. Lewis, Officer in Charge
Patea—J. W. Glenny, Officer in Charge
Picton—F. J. Robertshaw, Officer in Charge
Chatham Islands—R. S. Florance, Officer in Charge

MARINE DEPARTMENT.

Minister of Marine—Hon. W. Hall-Jones
Secretary—W. T. Glasgow
Chief Clerk—G. Allport
Clerks—J. J. D. Grix, G. Sinclair
Cadet—A. P. Owens
Marine Engineer for the Colony—W. H. Hales
Nautical Adviser and Chief Examiner of Masters and Mates—H. S. Blackburne
Weather Reporter—R. A. Edwin, Com. R.N.
Chief Inspector of Machinery, Principal Engineer Surveyor, and Chief Examiner of Engineers—R. Duncan
Chief Clerk—R. P. Milne
Clerk—J. H. Macalister
Cadet—
Inspectors of Machinery, Engineer Surveyors, and Examiners of Engineers:—Auckland—L. Blackwood, S. Dalrymple; Wellington—H. A. McGregor, P. J. Carman, A. Calvert; Christchurch—G. Croll, A. McVicar; Dunedin—H. Wetherilt, A. Walker; Invercargill—A. W. Bethune
Board of Examiners of Stationary, Traction, Locomotive, and Winding Engine Drivers—Robert Duncan, Chief Inspector of Machinery, Chairman; John Hayes, F.S.G.C., Inspecting Engineer of Mines; P. G. Hay, M.A., M.Inst.C.E.; R. P. Milne, Secretary
Superintendent of Mercantile Marine and Examiner of Masters and Mates, Auckland—W. D. Reid
Superintendent of Mercantile Marine and Examiner of Masters and Mates—Wellington, G. G. Smith
Superintendent of Mercantile Marine and Examiner of Masters and Mates, Lyttelton—J. A. H. Marciel
Superintendent of Mercantile Marine and Examiner of Masters and Mates, Dunedin—C. E. W. Fleming
Master of s.s. "Tutanekai"—C. F. Post
Master of s.s. "Hinemoa"—J. Bollons

INSPECTORS OF SEA-FISHERIES.

Russell—H. Stephenson
Whangarei—J. Munro
Wellington—L. F. Ayson and F. Moorhouse
Hokitika—J. Duncan
Bluff—P. McGrath

HARBOURMASTERS.*

Collingwood—F. Stallard
Foxton—A. Seabury
Hokianga—G. Martin
Kaipara—J. Christy Smith
Manukau—J. Neale
Motueka—H. L. Moffatt
Picton—T. Edwards
Port Robinson—J. Sinclair
Russell—H. Stephenson
Waitapu—S. G. Robinson

STAMP DEPARTMENT.

Commissioner of Stamp Duties—Hon. Jas. Carroll
Secretary for Stamps—C. A. St. G. Hickson
Chief Clerk and Accountant—H. O. Williams
Custodian and Issuer of Stamps—W. H. Shore
Record and Receiving Clerk—J. P. Murphy
Clerk—J. Murray
Chief Stamper—C. Howe
Cadet—D. Hodges
Cadette—C. McIntosh

* The more important harbours are controlled by local Boards, not by the Marine Department.

DEPUTY COMMISSIONERS OF STAMPS.

Auckland—E. Bamford
Gisborne—C. H. W. Dixon
Taranaki—R. L. Stanford
Hawke's Bay—Thos. Hall
Wellington—C. A. St. G. Hickson
Wanganui—J. F. McBeth
Nelson—W. W. de Castro
Marlborough—C. E. Nalder
Canterbury—E. Denham
Timaru—J. A. Hutton
Otago—P. C. Corliss
Southland—W. Wyinks
Westland—V. G. Day

LAND TRANSFER DEPARTMENT AND DEEDS REGISTRY.

Registrar-General of Land and Deeds—G. B. Davy
Secretary, Land and Deeds—C. A. St. G. Hickson

DISTRICT LAND REGISTRARS AND REGISTRARS OF DEEDS.

Auckland—E. Bamford
Taranaki—R. L. Stanford
Wellington—Wm. Stuart
Hawke's Bay—Thos. Hall
Gisborne—J. M. Batham
Nelson—H. W. Robinson
Marlborough—J. Allen
Canterbury—G. G. Bridges, District Land Registrar; E. Denham, Registrar of Deeds
Otago—H. Turton
Southland—W. Wyinks
Westland—V. G. Day

EXAMINERS OF TITLES.

Auckland—E. Bamford
Taranaki—R. L. Stanford
Wellington—Wm. Stuart, H. Howorth
Hawke's Bay—Thos. Hall
Gisborne—J. M. Batham
Nelson—H. W. Robinson
Marlborough—Wm. Stuart
Canterbury—G. G. Bridges
Otago—H. Turton
Southland—W. Wyinks
Westland—V. G. Day

REGISTRAR OF JOINT-STOCK COMPANIES.

C. A. St. G. Hickson

REGISTRARS OF BUILDING SOCIETIES, INDUSTRIAL AND PROVIDENT SOCIETIES, AND ASSISTANT REGISTRARS OF JOINT-STOCK COMPANIES.

Auckland—E. Bamford
Taranaki—R. L. Stanford
Hawke's Bay—Thos. Hall
Wellington—H. O. Williams
Nelson—W. W. de Castro
Marlborough—C. E. Nalder
Canterbury—E. Denham
Otago—P. C. Corliss
Southland—W. Wyinks
Westland—V. G. Day
Poverty Bay—C. H. W. Dixon

EDUCATION DEPARTMENT.

Minister of Education (administering also Native schools, industrial schools, and the institution for deaf-mutes)—Hon. W. C. Walker
Secretary for Education and Inspector-General of Schools—George Hogben, M.A.
Assistant Secretary—Sir E. O. Gibbes, Bart.
Clerks—F. K. de Castro, H. B. Kirk, M.A., R. H. Pope, F. L. Severne, E. C. Banks, F. D. Thomson, B.A., H. J. Barrett, T. G. Gilbert, J. Beck, I. Davey, I. Robertson, C. T. Wild, G. P. Prichard
Inspector of Native Schools—James H. Pope. Assistant Inspector—H. B. Kirk, M.A. Organizing Instructor—W. W. Bird, M.A.
Inspectors of Technical Instruction—Rev. E. C. Isaac, M. H. Browne
Inspectors of Industrial Schools—R. H. Pope, T. A. Walker

EDUCATION BOARDS, WITH NAMES OF SECRETARIES.

Auckland—V. E. Rice
Taranaki—P. S. Whitcombe
Wanganui—A. A. Browne
Wellington—A. Dorset
Hawke's Bay—G. T. Fannin
Marlborough—J. Smith
Nelson—S. Ellis
Grey—W. Riemenschneider
Westland—A. J. Morton, B.A.
Canterbury North—H. C. Lane
Canterbury South—J. H. Bamfield
Otago—P. G. Pryde
Southland—J. Neill

SCHOOL COMMISSIONERS

(*Administrators of Education Reserves, with Names of Secretaries*).

Auckland—H. N. Garland
Taranaki—F. P. Corkill
Wellington—N. J. Tone
Hawke's Bay—E. P. A. Platford
Marlborough—J. Smith
Nelson—A. T. Jones
Westland—A. J. Morton
Canterbury—H. H. Pitman
Otago—C. Macandrew

INDUSTRIAL SCHOOLS.

Government Schools.

Auckland Industrial School—Miss S. E. Jackson, Manager
Wellington Receiving Home—Mrs. E. S. Dick, Manager
Burnham Industrial School (Canterbury)—T. Archey, Manager
Christchurch Receiving Home—Miss A. B. Cox, Manager
Caversham Industrial School (Otago)—G. M. Burlinson, Manager

Private Schools.

St. Mary's Industrial School, Ponsonby—Rev. G. H. Gillan, Manager
St. Joseph's Industrial School, Wellington—Rev. W. J. Lewis, Manager
St. Mary's Industrial School, Nelson—Rev. W. J. Mahoney, Manager
St. Vincent de Paul's Industrial School, Dunedin—Rev. P. Murphy, Manager

INSTITUTION FOR DEAF-MUTES, SUMNER.

Director—G. van Asch
Steward—H. Buttle

LUNATIC ASYLUMS.

Inspector—Duncan MacGregor, M.A., M.B., C.M.*
Assistant Inspector—Mrs. Grace Neill
Medical Superintendent, Auckland Asylum—R. M. Beattie, M.B.
Medical Superintendent, Christchurch Asylum—E. G. Levinge, M.B.
Medical Superintendent, Porirua Asylum—Gray Hassell, M.D.
Medical Superintendent, Wellington Asylum—W. Baxter Gow, M.D.
Medical Superintendent, Seacliff Asylum—F. Truby King, M.B.
Superintendent, Hokitika Asylum—H. Gribben; Medical Officer, H. Macandrew, M.B.
Superintendent, Nelson Asylum—J. Morrison; Medical Officer, W. J. Mackie, M.D.
Ashburn Hall, Waikari (private asylum)—Proprietors, Dr. Alexander and Executor of James Hume; Medical Officer, Frank Hay, M.B.

MINES DEPARTMENT.

CHIEF OFFICE.

Minister of Mines—Hon. James McGowan
Under-Secretary for Mines—H. J. H. Eliott
Inspecting Engineer—John Hayes
Chief Clerk—T. H. Hamer
Clerk—H. E. Radcliffe
Analyst—J. S. Maclaurin, D.Sc., F.C.S.
Geologist—Alexander McKay, F.G.S.
Assistant Geologist—W. A. McKay
Draughtsman—C. H. Pierard
Shorthand Writer—J. T. Watkins

INSPECTORS OF MINES.

Thames and Auckland Districts—James Coutts; Assistant Inspector, Thomas Ryan: Canterbury, Dunedin, and Southland Districts—E. R. Green; Assistant Inspector, Robert McIntosh; Cadet, H. Paton: West Coast Districts—R. Tennent; Assistant Inspector—A. H. Richards

MINING BUREAU.

Secretary—P. Galvin

MANAGERS OF WATER-RACES.

Waimea-Kumara—A. Aitken
Mount Ida—R. Murray

SCHOOLS OF MINES.

Lecturers and Instructors: Thames—F. B. Allen, M.A., B.Sc.; Assistant, K. M. Barrance: Reefton—J. W. Lee: Coromandel—P. J. MacLeod: Waihi—P. G. Morgan, M.A.; Assistant, W. H. Baker

BOARD OF EXAMINERS UNDER "THE COAL-MINES ACT, 1891."

The Director of the Geological Survey of New Zealand; the Surveyor-General; the Inspecting Engineer of Mines;

* Also holds appointment of Inspector of Hospitals and Charitable Institutions.

the Chief Inspector of Machinery, Wellington; James Bishop, of Brunnerton; Alfred Benjamin Lindop, of Denniston; and William M. Shore, of Kaitangata

BOARD OF EXAMINERS UNDER "THE MINING ACT, 1891."

Same official members as above Board, excepting the Chief Inspector of Machinery, Wellington, with the following private members: H. A. Gordon, F. G. S., Auckland; Thomas Aitken Dunlop, Thames; Patrick Quirk Caples, Reefton; and Francis Hodge, Coromandel

The Director of the Geological Survey of New Zealand is Chairman of both Boards, and Mr. T. H. Hamer is the Secretary

GEOLOGICAL SURVEY, MUSEUM, AND OBSERVATORIES.

Minister in Charge—The Hon. Minister of Mines

Director — Sir J. Hector, K.C.M.G., M.D., F.R.S.

Clerk, Curator, and Meteorological Observer for Wellington—R. B. Gore

Astronomical Observer—T. King

Meteorological Observer, Auckland—T. F. Cheeseman, F.L.S.

Meteorological Observer, Dunedin — H. Skey

Meteorological Observer, New Plymouth —G. W. Palmer

Meteorological Observer, Hokitika—A. D. Macfarlane

Meteorological Observer, Rotorua—Dr. Kenny

Meteorological Observer, Te Aroha—W. Hill

Meteorological Observer, Lincoln—M. Guérin

Meteorological Observer, Hanmer Plains —Miss C. Taylor

NEW ZEALAND INSTITUTE.

Manager—Sir J. Hector, K.C.M.G., M.D., F.R.S.

Hon. Treasurer—W. T. L. Travers, F.L.S.

Secretary—R. B. Gore

DEFENCE DEPARTMENT.

Minister of Defence—Rt. Hon. R. J. Seddon, P.C.

Under-Secretary — Sir A. P. Douglas, Bart. (Retired Lieutenant, R.N.), Major, N.Z.M.

Commandant of the N.Z. Forces.

Colonel Arthur Pole Penton, N.Z.M. (Lieut.-Colonel, R.A.)

Staff Officers to the Commandant of the N.Z. Forces.

Major Wm. Robarts Napier Madocks, N.Z.M. (Major, R.A.)

Captain L. J. Joyce, N.Z.M. (acting)

Captain N. L. D'A. Smith, N.Z.M. (acting)

Captain J. G. Hughes, N.Z.M. (acting)

Staff Officers for the Instruction of Mounted Rifle Volunteers.

Middle and South Islands — Lieut.-Colonel Alfred W. Robin, C.B., N.Z.M.

North Island — Lieut.-Colonel Richard Hutton Davies, N.Z.M.

Clerk—T. F. Grey

Clerical Cadet—A. J. Baker

Commandant Military School of Instruction, Wellington.

Major Robert Haylock Owen, N.Z.M. (Captain, H.M. South Lancashire Regiment)

Defence Store Department.

Storekeeper—J. O'Sullivan

Assistant Storekeeper—H. Jerred

NEW ZEALAND PERMANENT MILITIA.

No. 1 Service Company.

Lieut.-Colonel W. B. Messenger

Captain H. C. Morrison

Captain J. E. Hume

Lieutenant H. E. Pilkington

Lieutenant W. P. Wall

Lieutenant M. M. Gard'ner

Inspectors of Submarine Mining Establishments.

Captain J. Falconer

Captain William Coyle, late Coast Brigade, R.E.

No. 2 Service Company.

Captain J. Falconer

Captain William Coyle, late Coast Brigade, R.E.,

Lieutenant F. Symon

Surgeon, Permanent Militia (Wellington).

John Teare, M.B.

Surgeon, Permanent Militia (Auckland).

John Wilkins, M.R.C.S.E.

Surgeon, Permanent Militia (Lyttelton).

C. H. Upham, M.R.C.S.E.

Honorary Surgeon, Permanent Militia.

Patrick J. O'Neill O'Carroll, L.R.C.S.I.

Honorary Chaplain, Lyttelton Detachment Permanent Militia.

The Rev. E. E. Chambers

Honorary Chaplain, Wellington Detachment Permanent Militia.

The Rev. W. C. Waters, M.A.

Officers Commanding Militia and Volunteer Districts, and Adjutants.

Auckland (temporary) — Lieut.-Colonel William Bagnall White, N.Z. Vols.; Acting Adjutant, Captain James Reid
Wellington — Lieut.-Colonel Stuart Newall, C.B., N.Z.M.
Canterbury—Lieut.-Colonel Henry Gordon, N.Z.M., late H.M. 44th Foot
North Otago (sub-district)—V.D. Lieut.-Colonel Alfred Headland
Otago—Lieut.-Colonel William Holden Webb, N.Z.M., late H.M. 109th Foot
Southland (sub-district) — Major John Edward Hawkins, N.Z. Vols.
Nelson (temporary) — Captain George Cecil Burleigh Wolfe, late R.M.L.I.

DEPARTMENT OF LANDS AND SURVEY.

Head Office.

Minister of Lands—Hon. Thomas Young Duncan
Surveyor-General and Secretary for Crown Lands—
Assistant Surveyor-General and Under-Secretary for Crown Lands—Alexander Barron
Chief Draughtsman—F. W. Flanagan
Auditor of Land Revenue — W. G. Runcie
Superintendent of Village-settlements—J. E. March

Auckland District.

Chief Surveyor and Commissioner of Crown Lands—G. J. Mueller
District Surveyors—L. Cussen, J. Baber, jun., G. A. Martin, H. D. M. Haszard
Assistant Surveyors—T. K. Thompson, R. S. Galbraith, H. F. Edgecumbe
Chief Draughtsman—W. C. Kensington
Receiver of Land Revenue — T. M. Taylor

Hawke's Bay District.

Chief Surveyor and Commissioner of Crown Lands—E. C. Gold Smith
District Land Officer, Gisborne, L. Smith
District Surveyors — L. Smith, James Hay
Assistant Surveyor—P. A. Dalziel
Chief Draughtsman—F. Simpson
Receiver of Land Revenue—F. Bull

Taranaki District.

Chief Surveyor and Commissioner of Crown Lands—J. Strauchon
District Surveyors—H. M. Skeet, G. H. Bullard
Assistant-Surveyors—J. F. Frith, W. T. Morpeth, R. W. Watson
Chief Draughtsman—C. R. Pollen
Receiver of Land Revenue—G. P. Doile

Wellington District.

Chief Surveyor and Commissioner of Crown Lands—J. W. A. Marchant
District Surveyors—J. D. Climie, F. A. Thompson, H. J. Lowe, W. J. Wheeler
Assistant Surveyors—J. McKay, J. R. Strachan
Chief Draughtsman—J. Mackenzie
Receiver of Land Revenue—T. G. Waitt

Nelson District.

Chief Surveyor and Commissioner of Crown Lands—T. Humphries
District Surveyors—J. A. Montgomerie, J. Snodgrass, R. T. Sadd
Assistant Surveyors — J. D. Thomson, C. Kain
Chief Draughtsman and Receiver of Land Revenue—H. Trent

Marlborough District.

Chief Surveyor and Commissioner of Crown Lands—C. W. Adams
District Surveyors—F. S. Smith, D. W. Gillies
Assistant Surveyor—E. W. Buckeridge
Chief Draughtsman and Receiver of Land Revenue—W. Armstrong

Westland District.

Chief Surveyor and Commissioner of Crown Lands—W. G. Murray
Assistant Surveyors — W. Wilson, T. Brook
Chief Draughtsman and Receiver of Land Revenue—G. J. Roberts

CANTERBURY DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—S. Weetman
District Surveyors—T. N. Broderick, G. H. M. McClure, L. O. Mathias
Chief Draughtsman—C. B. Shanks
Receiver of Land Revenue—A. A. McNab
Caretaker, Hanmer Springs—J. Rogers
Manager, Hanmer Springs Sanatorium—D. McDonald

OTAGO DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—David Barron
District Surveyors—J. Langmuir, E. H. Wilmot, D. M. Calder
Assistant Surveyors—W. D. R. McCurdie, W. T. Neill
Chief Draughtsman—S. Thompson
Receiver of Land Revenue—G. A. Reade

SOUTHLAND DISTRICT.

Chief Surveyor and Commissioner of Crown Lands—John Hay
Assistant Surveyor—A. Hodgkinson
Chief Draughtsman—G. Robinson
Receiver of Land Revenue—H. L. Welch

MEMBERS OF LAND BOARDS.

Auckland—G. J. Mueller, R. Thompson, B. Harris, D. Lundon, J. Renshaw
Hawke's Bay—E. C. Gold Smith, C. Hall, T. Hyde, R. R. Groom, G. Mathewson
Taranaki—J. Strauchon, T. Kelly, C. K. Stock, J. Heslop, James Rattenbury
Wellington—J. W. A. Marchant, A. W. Hogg, J. Stevens, A. Reese
Nelson—Thomas Humphries, John Graham, D. Bate, J. Marshall, O. Lynch
Marlborough—C. W. Adams, J. Redwood, A. P. Seymour, J. Duncan, F. Parsons
Westland—W. G. Murray, A. Matheson, J. Chesney, J. S. Lang, A. Cumming
Canterbury—S. Weetman, A. C. Pringle, R. Meredith, J. McLachlan, J. Sealy
Otago—D. Barron, H. H. Kirkpatrick, H. Clark, J. Duncan, W. Dallas
Southland—J. Hay, A. Kinross, J. McIntyre, A. Baldey, D. King

DEPARTMENT OF ROADS.

HEAD OFFICE.

Minister in Charge—Hon. T. Y. Duncan
Chief Engineer of Roads—C. W. Hursthouse
Chief Clerk—W. S. Short
Chief Accountant—H. J. Knowles

District Officers.

Road Surveyors—Auckland, A. B. Wright; Te Kuiti, T. Burd; Rotorua, A. C. Turner; Hawke's Bay, ; Taranaki, G. T. Murray; Wanganui, R. H. Reaney; Wellington, G. F. Robinson; Nelson, ; Marlborough, C. H. Williams; Westland, F. Wither; Canterbury, ; Otago, ; Southland, N. L. Falkiner

"THE LAND FOR SETTLEMENTS ACT, 1894."

BOARD OF LAND PURCHASE COMMISSIONERS.

Chairman of Board and Land Purchase Inspector—Jas. McKerrow, F.R.A.S.

The Board consists of the Land Purchase Inspector as Chairman, the Surveyor-General, the Commissioner of Taxes—these for the whole colony—with the Commissioners of Crown Lands and a member of the Land Board in each land district, who are members only for the business arising within their respective districts.

DEPARTMENT OF AGRICULTURE.

CHIEF OFFICE.

Minister in Charge—Hon. T. Y. Duncan
Secretary of Agriculture and Chief Inspector of Stock—John D. Ritchie
Produce Commissioner, London—H. C. Cameron
Assistant Chief Inspector of Stock—T. A. Fraser
Chief Clerk—Richard Evatt
Biologist—T. W. Kirk, F.L.S.
Clerks—J. E. D. Spicer, F. S. Pope, J. Longton, F. C. Hjorring, A. Calcott, F. C. Matthews
Shorthand Writer and Typist—D. Sinclair
Analyst and Agricultural Chemist—B. C. Aston
Poultry Expert—D. D. Hyde
Veterinary Surgeons (Ms.R.C.V.S.)—J. A. Gilruth (Chief), C. J. Reakes, A. R. Young, J. G. Clayton, A. R. Crabb, J. F. McEachran; H. C. Wilkie, F.R.C.V.S.
Veterinary Surgeons and Meat Inspectors (Ms.R.C.V.S.)—D. H. Rait, P. M.

Edgar, C. R. Neale, J. R. Charlton, T. G. Lilico, J. A. R. Towers, A. McL. Paterson, D. Machattie, J. Lyons, J. Kerrigan, V. A. Bankes, J. Nuttall, F. C. Robertson, W. H. Hawthorn, W. D. Snowball, A. W. Barnes, J. McKie, W. G. Taylor

Meat Inspectors—H. Marsack, H. S. S. Kyle

Assistant, Veterinary Laboratory, Wellington—G. H. Barker

Relieving Inspector of Stock—D. Munro

Dairy Commissioner—J. A. Kinsella

Dairy Instructors and Graders — J. Sawers, Wyndham and Bluff; D. Cuddie, Wellington; A. A. Thornton, Lyttelton and Dunedin; J. Johnston, D. Dickie, D. J. McGowan, New Plymouth; E. Townshend, Auckland

Dairy Inspectors — G. M. Williamson, Auckland; P. Thomson, Wellington; A. Macpherson, Christchurch; J. G. Parker, Dunedin

Assistant Entomologist and Fruit Inspector at Auckland—Thomas Broun, F.E.S.

Pomologists—W. J. Palmer, Auckland; J. C. Blackmore, Christchurch; S. I. Fitch, Christchurch; W. A. Boucher, Auckland

Fruit Inspectors—R. Hull, Auckland; H. Palethorpe, Wellington; A. C. Smale, Christchurch; A. F. Cargill, Dunedin

Experimental Stations:—
Momohaki—F. Gillanders, Farm Overseer; T. H. Chapman, Nurseryman
Levin—G. Ross, Farm Overseer
Wairangi—N. Kensington, Farm Overseer

Hemp-grader—C. J. Fulton

Caretakers, Quarantine-stations — A. Dickson, Auckland; J. P. Ross, Wellington; A. F. Laurensen, Christchurch

Inspectors of Stock.

Auckland—E. Clifton (in charge), F. H. Brittain, Auckland; J. B. Stone, Whangarei; D. Ross, Hamilton; H. E. Collett, Tauranga

Napier—W. Miller (in charge), C. Thomson, Gisborne; J. Kerr, Te Awamutu; W. R. Rutherford, Wairoa; F. G. Wayne, Hastings; J. Harvey, Woodville

Wairarapa—G. H. Jenkinson, Masterton (in charge); T. O Webb, Carterton

Wellington—J. Drummond, Wellington

West Coast—A. K. Blundell (in charge), Wanganui; J. W. Deem, Hawera; R. Rowan, New Plymouth; J. Duncan, Palmerston North; V. A. Huddleston, Hunterville

Nelson—H. M. Campbell, Nelson (in charge); G. S. Cooke, Richmond

Marlborough—John Moore, Blenheim

Westland—C. C. Empson, Hokitika

Canterbury-Kaikoura—R. F. Holderness (in charge), E. A. Dowden, Christchurch; C. A. Cunningham, Rangiora; J. C. Huddleston, Rotherham; Blair Fullarton, Ashburton

South Canterbury—E. A. Field, Timaru; W. Black, Fairlie; W. Wills, Kurow

Otago—J. E. Thomson, Dunedin; A. Ironside, Mosgiel; J. C. Miller, Oamaru; R. Wright, Milton; J. L. Bruce, Balclutha; G. McLeod, Clyde; J. Budge, Queenstown; R. I. Gossage, Naseby; A. Mills, Lawrence; H. Hill, Palmerston; W. Dalgleish, Gore; H. T. Turner, Invercargill; T. Gilmour, Riverton; J. W. Raymond, Bluff

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VALUATION DEPARTMENT.

Valuer-General—John McGowan

Deputy Valuer-General—G. F. C. Campbell

Chief Clerk—F. J. M. D. Walmsley

Clerks—J. P. Dugdale, H. L. Wiggins, A. E. Fowler, J. Atkinson, H. Redmond

Cadet—F. C. Douglas

Draughtsman—H. H. Seed

Supervising Valuers—W. Duncan, Auckland; A. P. O'Callaghan, Christchurch; A. McKerrow, Dunedin; H. Carswell, Invercargill

District Valuers—James I. Wilson, jun., Whangarei; W. Garrett, J. J. Reynolds, Auckland; W. H. Wallis, Hamilton; Ian S. Simson, Gisborne; W. E. Griffin, Napier; H. J. C. Coutts, Hawera; S. Hill, New Plymouth; A. Barns, Wanganui; R. Gardner, Palmerston North; J. Fraser, Masterton; J. Ames, Wellington; T. W. Caverhill, Petone; E. Kenny, Picton; J. Glen, Nelson; J. Webster, Hokitika; A. D. Bayfield, Westport; D. Dick, Ashley; J. Whitelaw, Christchurch; A. Freeman, Christchurch; A. Allan, Timaru; E. A. Atkinson, Oamaru; W. L. Craig, Palmerston South; W. Dallas,

Balclutha; A. J. Burns, Dunedin; J. George, Queenstown; John Smaill, Gore; Charles Rout, A. Pyper, Invercargill
Clerks—Auckland, E. W. Watson; Christchurch, J. M. Wheeler, A. Millar; Dunedin, A. Clothier, J. T. Bolt; Invercargill, T. Oswin, C. de R. Andrews
Cadet—Christchurch, E. J. R. Cumming

GOVERNMENT LIFE INSURANCE DEPARTMENT.

Commissioner—J. H. Richardson, F.F.A., F.I.A.V.
Assistant Commissioner—D. M. Luckie
Actuary—Morris Fox
Secretary—W. B. Hudson
Chief Medical Officer—T. Cahill, M.D.
Accountant—G. W. Barltrop
Assistant Actuary—G. Leslie
Chief Clerk—R. C. Niven
Second Assistant Actuary—P. Muter
Office Examiner—G. A. Kennedy
Clerks—J. W. Kinniburgh, D. J. McG. McKenzie, W. S. Smith, A. H. Hamerton, F. B. Bolt, C. E. Galwey, T. L. Barker, A. L. B. Jordan, H. S. Manning, A. Avery, G. Webb, C. W. Palmer, F. K. Kelling, J. B. Young, G. C. Fache, C. J. Alexander, J. A. Thomson, H. Rose, A. de Castro, R. P. Hood, G. A. N. Campbell, A. T. Traversi, R. T. Smith, F. M. Leckie, W. H. Woon, S. P. Hawthorne, J. G. Reid, A. E. Jackson, C. H. E. Stichbury, J. R. Samson, H. H. Henderson, R. Fullerton, A. H. Johnstone, H. L. Levestam, R. S. Latta, T. Fouhy, J. T. Gunn, G. C. Rodda, G. E. Sadd, T. M. Dimant, W. Spence, M. L. Wilson, B. Trevithick
Chief Messenger—W. Archer

Auckland Agency.

District Manager—W. J. Speight
Chief Clerk—J. K. Blenkhorn
Clerks—C. H. Ralph, H. Wylie

Napier Agency.

Resident Agent—J. H. Dean

Wanganui Agency.

Resident Agent—A. E. Allison

Wellington Agency.

District Manager and Supervisor of New Business—G. Robertson
Chief Clerk—M. J. K. Heywood
Clerks—W. C. Marchant, A. M. McDonald

Nelson Agency.

Resident Agent—A. P. Burnes

Greymouth Agency.

Resident Agent—A. W. G. Burnes

Christchurch Agency.

District Manager—J. C. Prudhoe
Chief Clerk—J. W. H. Wood
Clerk—G. J. Robertson

Timaru Agency.

Resident Agent—S. T. Wicksteed

Oamaru Agency.

Resident Agent—O. H. Pinel

Dunedin Agency.

District Manager—R. S. McGowan
Chief Clerk—G. Crichton
Clerks—A. Marryatt, G. S. Nicoll

Invercargill Agency.

Resident Agent—J. Findlay
Clerk—W. J. Ewart

PUBLIC TRUST OFFICE.

Public Trustee—J. W. Poynton
Solicitor—F. J. Wilson
Chief Clerk—A. A. K. Duncan
Assistant Chief Clerk—T. S. Ronaldson
Accountant—M. Townsend
Clerks—T. Stephens, P. Fair, C. Zachariah, P. Hervey, E. C. Reeves, W. A. Fordham, A. Purdie, G. A. Smyth, A. J. Cross, S. Dimant, E. A. Smythe, J. B. Jack, W. Barr, E. O. Hales, C. Morris, S. W. Smith, C. A. Goldsmith, H. Masters, R. Price, N. M. Chesney, H. Turner, A. Peterson, O. Beck, M. E. Nash
District Agent, Christchurch—M. C. Barnett; Clerks, T. R. Saywell, J. Allen, P. A. Devereux
District Agent, Auckland—E. F. Warren; Clerk, K. N. H. Browne
District Agent, Dunedin—F. H. Morice; Clerk, W. S. McGowan; Cadet, W. Campbell
District Agent, Greymouth—T. D. Kendall

District Agent, Nelson—E. P. Watkis
West Coast Settlement Reserves Agent and District Agent, New Plymouth—Thomas W. Fisher; Clerk, H. Oswin

ADVANCES TO SETTLERS OFFICE.

Superintendent—John McGowan
Deputy Superintendent—G. F. C. Campbell
Chief Clerk—F. J. M. D. Walmsley
Inspecting Accountant—P. Heyes
Clerks—W. Waddel, H. E. Williams, W. N. Hinchcliffe, J. E. Thompson, A. W. Knowles, W. Auld, C. T. Fraser, J. B. Wallis, T. W. Foote, M. J. Crombie, H. O'Rourke, A. A. Prichard, C. Wilson, C. B. Collins, R. G. McLennan, D. Fraser, A. Tudhope
Chief Valuers—W. Duncan, Auckland; A. P. O'Callaghan, Christchurch; A. McKerrow, Dunedin; H. Carswell, Invercargill
Clerks at Agencies—F. B. Robertson, Auckland; H. S. Barron, Invercargill

DEPARTMENT OF PUBLIC HEALTH.

Minister of Health—Hon. J. G. Ward
Chief Health Officer—J. Malcolm Mason, M.D., F.C.S., D.P.H., Cambridge
District Health Officer—T. H. A. Valintine, M.R.C.S.E., L. and D.P.H., R.C.P. Lond.
Health Officer to the Maoris—Maui Pomare, M.D.
Secretary—E. Hornemau
Clerks—Herbert B. Magrath, F. Willis
Port Health Officers,—
Auckland — Edward Wm. Sharman, L.R.C.P. *et* R.C.S. Edin., L.F.P.S. Glas.
Kaipara Heads—Captain J. C. Smith
Onehunga—W. G. Scott, L.S.A. Lond., M.R.C.S. Eng., M.D. Durh.
Gisborne—J. W. Williams, M.B. *et* Ch.M., M.D. Edin.
Napier—F. I. De Lisle, L. *et* L. Mid., R.C.P. Edin., L.S.A. Lond.
Nelson—A. J. Leggatt, M.R.C.S. Eng., L.S.A. Lond.
Wellington—D. P. James, F.R.C.S. Eng., L.R.C.P. Lond.
Lyttelton—C. H. Upham, M.R.C.S. Eng., L.R.C.P. Lond.
Port Chalmers—G. Hodges, M.B. *et* M.S. Edin.
Bluff—Jas. Torrance, M.B. *et* B.S. Univ. of N.Z.
Greymouth—C. L. Morice, M.R.C.S. Eng., L.R.C.S. Eng., L.S.A. Lond.
Vaccine Distributor—J. G. F. Wilford, M.R.C.S. Eng., L.S.A. Lond.

Cadets in Government Service to be Volunteers.

Cadets in the Civil Service are required, after arriving at the age of eighteen years, to serve for three years in a Volunteer corps. Heads of departments are required to see that cadets who come within the regulations join the Volunteer Force, and serve for the period named, and also to notify the Under-Secretary for Defence of the appointment of all cadets coming within this regulation.

ECCLESIASTICAL.

THERE is no State Church in the colony, nor is State aid given to any form of religion. Government in the early days set aside certain lands as endowments for various religious bodies, but nothing of the kind has been done for many years past.

CHURCH OF THE PROVINCE OF NEW ZEALAND, COMMONLY CALLED THE "CHURCH OF ENGLAND."

Bishops.

The Most Rev. William Garden Cowie, D.D., Auckland; consecrated 1869 (Primate).

The Right Rev. William Leonard Williams, D.D., Waiapu; consecrated 1895.

The Right Rev. Frederic Wallis, D.D., Wellington; consecrated 1895.

The Right Rev. Charles Oliver Mules, M.A., Nelson; consecrated 1892.

The Right Rev. Churchill Julius, D.D., Christchurch; consecrated 1890.

The Right Rev. Samuel Tarratt Nevill, D.D., Dunedin; consecrated 1871.

The Right Rev. Cecil Wilson, M.A., Melanesia; consecrated 1894.

ROMAN CATHOLIC CHURCH.

Archbishop.

The Most Rev. Francis Redwood, S.M., D.D., Archbishop and Metropolitan, Wellington; consecrated 1874.

Bishops.

The Right Rev. George Michael Lenihan, D.D., Auckland; consecrated 1896.

The Right Rev. John Joseph Grimes, S.M., D.D., Christchurch; consecrated 1887.

The Right Rev. Michael Verdon, D.D., Dunedin; consecrated 1896.

ANNUAL MEETINGS AND OFFICERS.

The principal present heads or officers of the various churches, and the places and times of holding the annual or periodical assemblies or meetings, are as follow:—

Church of England.—For Church purposes, the colony is divided into six dioceses, viz.: Auckland, Waiapu, Wellington, Nelson, Christchurch, and Dunedin. The General Synod meets every third year in one or other of the dioceses. Delegates attend from each diocese, and also from the diocese of Melanesia.—President, the Bishop of Auckland, Primate. The Diocesan Synods meet once a year, under the presidency of the Bishop of the diocese. The

next General Synod will be held in Auckland, on the 28th January, 1904.

Roman Catholic Church.—The diocese of Wellington, established in 1848, was in 1887 created the metropolitan see. There are three suffragan dioceses—Auckland, Christchurch, and Dunedin. A Retreat is held annually in each of the four dioceses, at the end of which a Synod is held, presided over by the Bishop, and at which all his clergy attend.

In January, 1899, the first Provincial Council of New Zealand was held in Wellington, under the presidency of the Metropolitan, and attended by all the Suffragan Bishops, and a number of priests elected specially in each diocese as representatives of the whole Catholic clergy in the colony. The decrees of this Council were approved by Rome in April, 1900, were published on 1st January, 1901, and are now binding in every diocese in New Zealand.

Presbyterian Church of New Zealand.—The Assembly has met annually, in February, at Auckland, Wellington, and Christchurch, in succession. It is expected an *in hunc effectum* meeting will be held in Dunedin about November, 1901, to consummate union with the Church of Otago and Southland. Moderator, the Right Rev. J. K. Elliott, B.A., Wellington; Clerk and Treasurer, Rev. David Sidey, D.D., Napier.

Presbyterian Church of Otago and Southland. — The Synod meets annually in October at Dunedin. Moderator, Rev. J. U. Spence, Dunedin; Principal Clerk, Rev. W. Bannerman, D.D., Roslyn, Dunedin; Assistant Clerk, Rev. A. M. Finlayson, Waitati; Church Factor, Mr. Frederick Smith, High Street, Dunedin. Theological Professors, Rev. John Dunlop, M.A., D.D., and Rev. Michael Watt, M.A., D.D. Mr. James Dunbar, Tutor in Greek.

Wesleyan Methodist Church.—The annual Conference meets on or about the last Tuesday in February, the exact date being determined by the President, who holds office for one year. Each Conference determines where the next one shall assemble. President (1901–1902), Rev. C. H. Garland, Auckland; Secretary, Rev. D. J. Murray, Thames. The next Conference is to meet in Wesley Church, Taranaki Street, Wellington.

Primitive Methodist Church.—A Conference takes place every January. The next is to be held at Webb Street, Wellington, commencing 8th January, 1902. The Conference officials for the present year are: President, Rev. W. S. Potter, Auckland; Vice-President, Mr. J. C. Thompson, J.P., Feilding; Secretary, Rev. E. Drake, Thames; Secretary of Executive Committee, Mr. D. Goldie, Pitt Street, Auckland; Treasurer of Mission Funds, Mr. Joseph Watkinson, Mangare, Auckland.

Baptist Union of New Zealand.—President, Rev. A. H. Collins, Ponsonby; Treasurer, Mr. A. Chidgey, Christchurch; Secretary, Rev. John Muirhead, South Dunedin. The Union comprises 34 churches, 3,594 members, 4,559 scholars in the Sunday schools, with 598 teachers. There are also 98 local preachers, and 21

preaching-stations. This religious body has a newspaper of its own, the *New Zealand Baptist*, published in Christchurch; Editor, Rev. F. W. Boreham, Mosgiel.

Congregational Union of New Zealand.—The annual meetings are held during the month of February, at such place as may be decided on by vote of the Council. Chairman for 1901–1902, Rev. J. Reid Glasson, Wellington; Chairman-elect, Rev. J. Sarginson, Christchurch; Secretary, Rev. W. Day, Auckland; Treasurer, Mr. W. H. Lyon, Auckland; Registrar, Mr. F. Meadowcroft, Wellington; Head Office, Auckland. In 1902 the meeting of the Council will be held at Auckland. The Committee of the Union meets in Auckland on the second Tuesday of each month.

Hebrews.—Ministers: Rev. S. A. Goldstein, Auckland; Rev. H. van Staveren, Wellington; Rev. A. T. Chodowski, Dunedin; Mr. Alexander Singer, Hokitika. Annual meetings of the general Congregations are usually held at these places during the month of Elul (about the end of August).

DEFENCES, MILITARY AND NAVAL.*

THE defence forces consist of the Permanent Militia (Artillery and Submarine Mining Corps), and the auxiliary forces of Volunteers (Cavalry, Mounted Rifles, Naval, Garrison, and Field Artillery, Submarine Miners, Engineers, Rifle, Cycle, and Bearer companies). There is a Commander of the Forces, who is an Imperial officer, and he has a Staff officer who is also an Imperial officer. To the Under-Secretary for Defence all questions of expenditure are referred; while the Chief Engineer of the Public Works Department has charge of the defence-works.

MILITARY INSTRUCTION.

A School of Military Instruction has been established at Wellington, with an officer of the Imperial forces as Commandant.

MILITIA AND VOLUNTEER DISTRICTS.

The two islands (North and Middle) are divided into five districts and two sub-districts, each commanded by a Field Officer of Militia or Volunteers, with a staff of drill-sergeants.

PERMANENT MILITIA (ARTILLERY).

This Force is divided into four companies, which are stationed at Auckland, Wellington (head-quarters), Lyttelton, and Dunedin; their principal duties are to look after and take charge of all guns, stores, ammunition, and munitions of war at these four centres. The Force consists of one lieut.-colonel, three captains, three subalterns, and four probationary cadets, with an establishment of 204 of all ranks.

* For information as to Military Contingents sent for service in South Africa, see Part III.

Permanent Militia (Submarine Miners).

This branch, like the Artillery, is divided amongst the four centres for submarine mining and torpedo work, and consists of two captains, one subaltern, and one probationary cadet, with a total establishment of 82 of all ranks. They have charge of four torpedo-boats and four steam-launches, and of all submarine mining and torpedo stores. They are likewise employed in blowing up rocks and wrecks, and generally improving harbours.

Volunteers.—Cavalry.

There are two troops of Cavalry, both being in the Middle Island. These corps are kept in a state of efficiency by going into camp for six days' training annually. The total strength of the two troops is 179 of all ranks.

Volunteers.—Mounted Rifles.

There are forty corps of Mounted Rifles in the North Island and twenty-eight in the Middle Island, with a total strength of 5,591 of all ranks. These corps go into camp for an annual training of six days.

Volunteers.—Naval Artillery.

There are eight batteries of this branch of the service (five in the North Island and three in the Middle Island), having a total strength of 766 of all ranks. These corps are divided into port and starboard watches at the four centres; some of these corps are trained to assist the Permanent Artillery in working heavy ordnance, whilst others act as auxiliaries to the Submarine Miners in submarine mining and torpedo work. These corps have cutters and other boats provided and kept up for them, and are instructed in rowing, knotting, splicing, signalling, and such like duties, and go into camp annually for sixteen days.

Volunteers.—Submarine Miners.

There are two corps of Submarine Miners in the North Island, of a total strength of 134. These corps also have cutters, &c., provided, and are instructed in rowing, knotting, splicing, signalling, and other duties pertaining to this branch of the service. Attendance at an annual camp is also compulsory.

Volunteers.—Garrison Artillery.

There is one corps of Garrison Artillery in the North, with a strength of 77 of all ranks, and one in the Middle Island, with a strength of 77 of all ranks: they go into camp annually for sixteen days.

Volunteers.—Field Artillery.

There are five batteries of Field Artillery (two in the North Island and three in the Middle Island), with a total of 430 of all ranks. They are armed with 15-pounder rifled breech-loaders,

9-pounder Armstrong breech-loading rifled guns, and 6-pounder Nordenfeldts, on field-carriages, and go into camp annually for sixteen days.

Volunteers.—Engineers.

This branch consists of four corps, with a total of 331 of all ranks, two in the North and two in the Middle Island. Besides carrying rifles they are provided with entrenching tools and all appliances for making and blowing up bridges or laying land-mines.

Volunteers.—Rifle Corps.

In this branch of the service there are a hundred and twenty corps (besides one honorary reserve, 38 strong), fifty-nine being in the North Island and sixty-one in the Middle Island, with a total strength of 7,929 of all ranks, including garrison bands.

Volunteers.—Cadet Corps.

There is a force of thirty-eight cadet corps—viz., fourteen in the North Island and twenty-four in the Middle Island, with a total strength of 1,908 of all ranks.

Volunteers.—Cycle Corps.

There are Volunteer cycle corps at Auckland, Wellington, Christchurch, and Dunedin, of a maximum strength of two officers and twenty-five non-commissioned officers, rank and file: they are attached to the infantry battalions at those centres.

Volunteers.—Bearer Corps.

Volunteer bearer corps at Auckland, Wellington, Christchurch, and Dunedin, of a maximum strength of three officers and fifty non-commissioned officers, rank and file, are attached to the infantry battalions at those centres. There is also a bearer corps to be formed at Nelson, of a maximum strength of two officers and twenty-five non-commissioned officers, rank and file.

Ordnance, Arms, etc.

The armament at the forts of the four centres consists of 8 in. 13-ton breech-loading rifled Elswick Ordnance Company's guns, with 6 in. 5-ton, of like pattern, all mounted on hydro-pneumatic disappearing carriages; 7 in. 7-ton muzzle-loading rifled guns, on traversing slides; 64-pounder rifled muzzle-loading converted 71 cwt. guns, on garrison standing carriages and traversing slides; 64-pounder rifled muzzle-loading 64 cwt. guns on traversing slides; 6-pounder quick-firing Nordenfeldts, on garrison pillar-mountings, and field-carriages; Hotchkiss quick-firing guns and Maxim machine guns. The Volunteer Field Artillery are armed with 15-pounder rifled breech-loading guns, 9-pounder Armstrong breech-loading rifled guns, and 6-pounder Nordenfeldts, and the whole of the adult portion of the Force have carbines or rifles of Martini-Enfield and Martini-Henry patterns; Cadets being armed with Snider carbines.

There is a large stock of Whitehead torpedoes, contact- and ground-mines, in charge of the Submarine Mining Companies, as well as four Thorneycroft torpedo-boats.

Enrolment, etc.

Members of the Permanent Militia are enrolled to serve for a period of eight years from enrolment, the last three years of such being in the Reserve, adult Volunteers for three years, and cadets two years. The Permanent Militia is principally recruited from men who have one year's efficient service in the Volunteers; and after passing the gunnery and other courses and serving three years in the Permanent Militia the men are eligible for transfer to police and prison services.

Instructors.

The Instructors for Permanent Artillery and Torpedo Corps are obtained from the School of Gunnery at Shoeburyness, and from the Royal Engineers, under a three years' engagement, on completion of which they return to their regiments.

Capitation.

An annual capitation of £2 10s. is granted to each efficient Volunteer, and a sum not exceeding £20 to each efficient cadet corps. One hundred and fifty rounds of ball-cartridge are issued each year free to every adult Volunteer, and twenty-five rounds of Snider ball to each cadet over thirteen years of age.

Administration.

The defence forces of New Zealand are administered under "The Defence Act, 1886."

Expenditure on the Establishment and Maintenance of Defences from 1884–85 to 1900–1901.

Year.	Military Expenditure.	Harbour Defences.	Total.
	£	£	£
1884–85	90,816	9,601	100,417
1885–86	91,242	127,167	218,409
1886–87	89,927	139,429	229,356
1887–88	122,061	73,458	195,519
1888–89	53,591	50,089	103,680
1889–90	63,614	15,752	79,366
1890–91	80,891	10,798	91,689
1891–92	75,343	7,644	82,987
1892–93	59,808	11,205	71,013
1893–94	56,570	3,976	60,546
1894–95	62,181	2,495	64,676
1895–96	84,981	3,314	88,295
1896–97	82,443	4,690	87,133
1897–98	83,004	2,525	85,529
1898–99	114,789	10,158	124,947
1899–1900	184,970	5,328	190,298
1900–1901	156,218	3,960	160,178

DÉPÔTS FOR SHIPWRECKED MARINERS.

As eleven of the crew of the barque "Spirit of the Dawn," which was wrecked on Antipodes Island on the 4th September, 1893, remained on the island for eighty-eight days without becoming aware of the existence of the dépôt of provisions and clothing for castaways which is established there, attention may usefully be drawn to the fact that such dépôts are maintained by the New Zealand Government on that island, and on the Auckland, Campbell, Bounty, Kermadec, and Snares Islands.

The following are the positions of the dépôts :—

Auckland Islands.—A dépôt is placed on the south side of Erebus Cove, Port Ross, and another in Camp Cove, Carnley Harbour, and a third at the head of Norman Inlet. One boat is placed on the north-west end of Adams Island, another on Enderby Island, and another on Rose Island.

Campbell Island.—A dépôt is erected in Tucker Cove, Perseverance Harbour, and a boat has been placed at the head of that harbour.

Antipodes Islands.—A dépôt is placed abreast the anchorage on the north-east side of the principal island.

Bounty Islands.—There is a dépôt on the principal island.

Snares Island.—A dépôt has been established on this island in Boat Harbour.

Kermadec Islands.—A dépôt is established on Macaulay Island, near Lava Cascade, on the north-east end of the island, and another on Curtis Island, at the head of Macdonald Cove, on the north-western end of the island.

Finger-posts to indicate the direction of the dépôts have also been put up.

The Government steamer visits the Auckland, Campbell, Antipodes, Bounty, and Snares Islands twice a year, and the Kermadec Islands once a year.

GRAVING DOCKS AND PATENT SLIPS.

VESSELS visiting New Zealand, and requiring docking or repairs, will find ample accommodation at the principal ports of the colony.

There are in New Zealand four graving-docks; two of these are situated in Auckland, one at Lyttelton, and one at Port Chalmers.

AUCKLAND DOCKS.

The Auckland Docks are the property of the Auckland Harbour Board, and cost, with machinery, appliances, &c., £207,000. The dimensions of the docks at Auckland are as follow:—

	Calliope Dock.	Auckland Dock.
Length over all	525 feet.	312 feet.
Length on floor	500 „	300 „
Breadth over all	110 „	65 „
Breadth on floor	40 „	42 „
Breadth at entrance	80 „	43 „
Depth of water on sill at high water ordinary spring tides)	33 „	13½ „

The following is the scale of charges for the use of the Auckland and Calliope Graving Docks and appliances:—

Auckland Graving Dock.	£	s.	d
Entrance fee	1	1	0
For every vessel of 100 tons (gross register), or under, per day	4	0	0
For every vessel over 100 tons (gross register), for first 100 tons, per day	4	0	0
For every additional ton (gross register), per day ..	0	0	2
For two or more vessels docking at the same time, the tonnage of which together does not exceed 100 tons (gross register), per day each	2	10	0

For shores cut in docking or hanging the vessel, there must be paid, according to injury done, such amount as may be fixed by the Dockmaster.

For use of steam-kiln, 10s. per day.

For use of pitch furnace, 10s. per day.

Calliope Graving Dock.	£	s.	d.
Entrance fee	5	5	0
For all vessels up to 300 tons (gross register)	20	0	0
For all vessels 301 to 400 tons "	22	10	0
" 401 to 500 tons "	25	0	0
" 501 to 600 tons "	27	10	0
" 601 to 700 tons "	30	0	0
" 701 to 800 tons "	32	10	0
" 801 to 900 tons "	35	0	0
" 901 to 1,000 tons "	37	10	0
" 1,001 to 1,100 tons "	40	0	0
" 1,101 to 1,200 tons "	45	0	0
" 1,201 to 1,300 tons "	50	0	0
" 1,301 to 1,500 tons "	55	0	0
" 1,501 to 2,000 tons "	60	0	0
" 2,001 to 3,000 tons "	65	0	0
" 3,001 to 4,000 tons "	70	0	0
" 4,001 to 5,000 tons "	75	0	0

The foregoing charges are for three days or less. After the third day in dock the following rates are charged:—

For all vessels up to 500 tons (gross register) ..	4d.	per ton per diem.
For all vessels of 501 tons to 1,000 tons	3d.	"
For all vessels over 1,001 tons up to 2,000 tons ..	2½d.	"
For all vessels over 2,001 tons and upwards ..	2d.	"

Twenty per cent. reduction on Calliope Dock rates is allowed when two or three vessels can arrange to dock on the same tide, and remain in dock the same number of hours; but such reduction is not allowed if any of the Auckland Harbour Board's vessels are docked at the same time as another vessel.

For shores cut in docking or hanging the vessel, there is to be paid, according to injury done, such amount as may be fixed by the Dockmaster.

During the year 1900, 95 vessels of various descriptions, with a total of 32,136 tons, made use of the Auckland Graving Dock, occupying it in all 174 days 10 hours, for repairs or painting.

In Calliope Dock 15 vessels were docked, viz.: 4 warships and 7 merchant steamers, also 2 dredges twice; of an aggregate tonnage of 19,749, and occupying the dock for 83 days.

Dock dues for the year amounted to £2,106 0s. 7d.

Under arrangement with the Admiralty, a complete plant of the most efficient and modern machinery has been provided at Calliope Dock-yard. The workshops are now under construction, and the machinery is being placed in position. This plant includes 80-ton shear-legs complete, trolly to carry 80 tons and rails, 10-ton steam crane at side of dock, engines, boilers, overhead travellers; planing, shaping, and slotting machines; radial drills, vertical drills, band-saws for iron, punching- and shearing-machines, plate-bending rolls; 24 in.-centre gantry lathe, 70 ft. bed; 9 in. and 12 in. gantry lathes, milling-machines, emery-grinders, screwing-machines, ditto for pipes, horizontal boring-machines, Root's blower, smiths' forges (six), coppersmith's forge, levelling-slabs, steam-hammers, lead-furnace, wall-cranes, zinc-bath, plate-furnace, jib-crane for foundry, circular-saw bench, band-saw for wood, lathe for wood, general joiner, carpenters' benches (four), kiln for steaming boards, Fox's trimmer, cupola to melt 5 tons of metal, countersinking-machine, pipe-bending machine, tools of various descriptions, moulders' bins, force-pumps for testing pipes, vice-benches, electric-light engines, dynamos, &c. (two); and all other appliances and machinery required to render the plant adequate to repair any of His Majesty's ships upon the station, or any merchant vessel visiting the port. The dock and machinery will be available for use, when not required for His Majesty's vessels, in effecting repairs to any merchant vessel requiring same. An abundant supply of the purest fresh water is available at Calliope Dock and Calliope Wharf; and upon the completion of the works contemplated a most complete establishment of up-to-date machinery and appliances will have been provided.

Wellington Patent Slip.

The Port of Wellington has no dock; but there is a well-equipped patent slip at Evans Bay, on which vessels of 2,000 tons can be safely hauled up. This slip is the property of a private company, and is in no way connected with the Harbour Board. It is 1,070ft. long, with a cradle 260ft. in length. There is a depth of 32ft. at high water at the outer end of the slip. A dolphin and buoys are laid down for swinging ships in Evans Bay.

The company has convenient workshops, which contain machinery necessary for effecting all ordinary repairs to vessels using the slip.

During the year ending 31st March, 1900, ninety-seven vessels of various sizes, of an aggregate of 36,837 tons, were taken up on the slip for repairs, cleaning, painting, &c. The charges for taking vessels on the slip and launching them are 1s. per ton on the gross tonnage for the first full twenty-four hours, and 6d. per ton per day afterwards, unless by special agreement.

Otago Graving Dock.

The dock at Port Chalmers is vested in the Otago Dock Trust, a body entirely distinct from the Otago Harbour Board. Vessels of large size can be taken in the Otago Dock, as the following measurements will show:—

Length over all	335 feet.
Length on the floor	328 "
Breadth over all	68 "
Breadth on floor	41 "
Breadth where ship's bilge would be	43 "
Breadth at dock gates	50 "
Depth of water on sill at high-water (ordinary spring tides)	17½ "

Connected with the Otago Dock are a large machine-shop, steam-hammer, and forge, with all the appliances necessary for performing any work that may be required by vessels visiting the port. An 80-ton shear-legs has also been erected for heavy lifts.

There is also a patent slip, used for taking up small vessels.

All vessels using the Otago Graving Dock are liable to dock dues according to the following scale (unless under special contract), revised since the beginning of 1896:—

	£	s.	d.
Vessels under 200 tons, for the first three days, or part of three days	25	0	0
Vessels of 200 tons, and under 800 tons	35	0	0
" 800 tons and upwards	50	0	0

And for every day, or part of a day, after the first three days:—

Vessels under 300 tons	8d. per register ton per day.
" 300 " and under 400 tons	7¾d. "
" 400 " " 500 "	7½d. "
" 500 " " 600 "	7¼d. "
" 600 " " 700 "	7d. "
" 700 " " 800 "	6¾d. "
" 800 " " 900 "	6½d. "
" 900 " " 1,000 "	6¼d. "
" 1,000 tons and upwards	6d. "

During the twelve months ended 31st December, 1900, the dock was in use 215 working-days. The number of vessels docked was fifty-five, having a total registered tonnage of 44,153.

Lyttelton Dock and Patent Slip.

The Graving-dock at Lyttelton, which is the property of the Harbour Board, is capable of docking men-of-war, or any of the large ocean steamers now running to the colony except the "Gothic." Its general dimensions are: Length over all, 503ft.; length on floor, 450ft.; breadth over all, 82ft.; breadth on floor, 46ft.; breadth at entrance, 62ft.; breadth where ship's bilge would be, on 6ft. blocks, 54½ft.; depth of water on sill at high-water springs, 23ft.

The scale of charges for the use of the dock and pumping machinery are as follow :—

	£	s.	d.
For all vessels up to 300 tons, for four days or less ..	20	0	0
" 301 to 400 tons, " ..	22	10	0
" 401 to 500 tons, " ..	25	0	0
" 501 to 600 tons, " ..	27	10	0
" 601 to 700 tons, " ..	30	0	0
" 701 to 800 tons, " ..	32	10	0
" 801 to 900 tons, " ..	35	0	0
" 901 to 1,000 tons, " ..	37	10	0
" 1,001 to 1,100 tons, " ..	40	0	0
" 1,101 to 1,200 tons, " ..	45	0	0
" 1,201 tons and upwards, " ..	50	0	0

After the fourth day in dock, the following rates are charged :—

For all vessels up to 500 tons ..	4d. per ton per day.
For all vessels of 501 tons to 1,000 tons ..	3d. "
For all vessels over 1,001 tons up to 2,000 tons ..	2¾d. "
2,001 tons up to 3,000 tons ..	2½d. "
" 3,001 tons up to 4,000 tons ..	2¼ "
" 4,001 tons up to 5,000 tons ..	2d. "

Twenty per cent. reduction on the above rates is allowed when two or three vessels can arrange to dock on the same tide and remain in dock the same number of hours. Two vessels of 1,000 tons each can be docked at the same time. The 20-per-cent. rebate is not allowed if any of the Lyttelton Harbour Board's vessels are docked at the same time as another vessel. The twenty-four hours constituting the first day of docking commences from the time of the dock being pumped out.

Any vessel belonging to H.M. Navy or any colonial Government, or any commissioned ship belonging to any foreign nation, is admitted into the graving dock without payment of the usual dock dues, but is charged only such sum as is necessary for the reimbursement of actual expenditure of stores, wages, and materials.

There are electric lights, one on each side of the graving-dock; and there is a workshop alongside the dock, and several other engineering works within a short distance of it, where repairs and heavy foundry-work can be done.

The graving dock and machinery cost £105,000. The interest and sinking fund on that sum, at 6½ per cent., amounts to £6,825 per annum. Since its construction, the dock dues for the eighteen years, ended 31st December, 1900, amounted to £16,547 7s. 1d., and the working expenses to £10,760 19s. 10d., leaving a credit balance for eighteen years, ended 31st December, 1900, of £5,786 7s. 3d.

During the year 1900 twenty-two vessels were docked, and the dock dues amounted to £888 2s. For the eighteen years ending 1900, 353 vessels were docked.

Patent Slip, Lyttelton.

Alongside the graving dock is a patent slip, with a cradle 150ft. in length, suitable for vessels of 300 tons. It belongs to the Harbour Board.

The following is the scale of charges:—

Up to 75 tons gross register, £4 for five days, and 10s. per day after the fifth day.

Over 75 tons and up to 150 tons gross register, £6 for five days, and 15s. per day after fifth day.

Over 150 tons and up to 250 tons gross register, £8 for five days, and 20s. per day after fifth day.

Over 250 tons gross register, £10 for five days, and 20s. per day after fifth day.

A day to mean between sunrise and sunset.

The above rates cover the cost of all labour connected with hauling up and launching (the crew of the vessel to give their assistance as may be required), and the cost of blocking a vessel and shifting the blocks after hauling up.

Timaru Slip.

The Timaru slip is capable of taking up a vessel of 200 tons.

Nelson Cradle.

The Anchor Steamship Company's cradle can take up a vessel of 150 tons.

HARBOURS.

Pilotage, Port Charges, etc.

Pilotage, port charges, berthage charges, &c., at fourteen of the principal harbours in New Zealand, as on the 1st January, 1901 (compiled by Mr. C. Hood Williams, Secretary to the Lyttelton Harbour Board):—

Auckland.

Pilotage (not compulsory): Sailing-vessels, inwards and outwards, 3d. per ton each way.

Steamers, inwards and outwards, 2d. per ton each way when services of pilot are taken.

Port charges: 3d. per ton half-yearly (on all vessels over 15 tons) in one payment.

Harbourmaster's fees: 1d. per ton.

Berthage: Every person who shall use any wharf with any vessel shall pay for the use thereof—Ferry steamers, £1 to £1 10s. per month; other vessels under 20 tons, 1s. per day, not exceeding 10s.. For every vessel not included in the above, ¼d. per ton per day. Outside berths, ⅛d. per ton per day.

Gisborne.

Pilotage (not compulsory): Sailing-vessels over 100 tons, first 100 tons, 6d. per ton; every ton over 100 tons, 2d. per ton. Into and out of Turanganui River: Sailing-vessels, 3d. per ton; sailing-vessels towed, 2d. per ton; steamers, 2d. per ton.

Port charges: Steamers, sailing-vessels, or boats plying within the harbour or engaged in coasting only, 3d. per ton quarterly; steamers sailing-vessels, or boats plying within the harbour and not engaged in coasting, only on arrival (not to exceed 10d. per ton in any half-year), 1d. per ton; steamers or sailing-vessels from beyond the Australian Colonies, on arrival, 4d. per ton.

Harbourmaster's fees: Free.

Berthage alongside the wharves: Per day or part, under 50 tons, 5s.; over 50 tons and up to 75 tons, 7s. 6d.; over 75 tons up to 100 tons, 10s.; for every additional 50 tons or fraction thereof, 2s. 6d. Vessels discharging outside of bars to pay half foregoing dues. Steamers to pay double rates as per tonnage; and in all cases sailing-vessels to make way for steamers.

Napier.

Pilotage (not compulsory): Into Inner Harbour—Sailing-vessels, 4d. per ton; steamers, 3d. per ton. To roadstead—First 100 tons, sailing-vessels, 6d. per ton; steamers, 3d. per ton. Every ton over 100 tons—Sailing-vessels, 2d. per ton; steamers, 1d. per ton. Into Breakwater Harbour—First 100 tons, sailing vessels, 6d. per ton; steamers, 3d. per ton. Every ton over 100 tons—Sailing-vessels, 2d. per ton; steamers, 1d. per ton. Outward pilotage, half rates.

Port charges: 6d. per ton quarterly in advance, vessels plying within port or engaged in coasting only; 2d. per ton on arrival of vessels not plying within port or not solely employed in coasting, but not to exceed 1s. per ton in any half-year. Ocean-going vessels (not being "colonial trading" or coasting vessels) returning to port within one month from date of first arrival are exempt from port charges for second or subsequent arrivals within one calendar month.

Harbourmaster's fees: 5s. per vessel of less than 60 tons. Steamers under 60 tons and licensed as lighters are exempt. 1d. per ton sailing-vessels 60 tons and upwards; 10s. per vessel steamers of 60 tons and under 120 tons; 1d. per ton steamers of 120 tons and upwards. Vessels paying for pilotage service inwards do not pay Harbourmaster's fees.

Berthage: Breakwater Harbour wharves—3d. per ton on cargo landed, shipped, or transhipped; 1s. each horse or large cattle shipped or transhipped; ½d. each sheep or small animal shipped or transhipped. Other wharves—10s. per vessel of 60 tons; £1 per vessel over 60 tons to 120 tons; 2d. per ton vessels over 120 tons. Half rates only charged where vessels entering the Inner Harbour pay for pilotage services.

Hawsers and moorings: Vessels at wharf in Breakwater Harbour—½d. per ton per day, first six days after day of arrival; ½d. per ton per day after six days, Sundays and holidays excepted. Vessels moored to buoys within Breakwater Harbour, ½d. per ton per day.

Fenders: Vessels at wharves in Breakwater Harbour—5s. per day, vessels under 500 tons; 7s. per day, vessels of 500 tons and under 1,000 tons; 10s. per day vessels of 1,000 tons and under 1,500 tons; 15s. per day, vessels of 1,500 tons and under 2,000 tons; £1 per day, vessels of 2,000 tons and upwards.

New Plymouth.

Pilotage (compulsory): Charged both inwards and outwards, intercolonial or coasting—Sailing-vessels, 3d. per ton; steamers, 1½d. per ton; foreign sailing-vessel or steamer, ½d. per ton.

Port charges: Intercolonial, 4d. per ton, payable half-yearly; foreign, ½d. per ton on arrival in roadstead.

Berthage rate: 3½d. per ton on all cargo landed, shipped, or transhipped outwards; on registered tonnage also ½d. per ton.

Warps: 1d. per ton register for first 100 tons; ½d. per ton for excess.

Fenders: 1s. per day or part of day.

Water (minimum 3s.): 5s. per 1,000 gallons.

Wanganui.

Pilotage: All vessels when piloted by signals from the staff only, 1d. per ton register. River pilotage, to be charged for any assistance rendered by the pilot or any of his crew inside the bar, 2d. per ton. When a pilot boards and conducts a vessel outside the bar, 3d. per ton. Steamers engaged in tendering ocean steamers at anchor in the roadstead charged half pilotage rates.

Port charges: Nil.

Harbourmaster's fees: Free.

Berthage: For every steamer using any wharf, being berthed alongside, and whether discharging or loading cargo or not, 2d. per ton on gross register for first day of eight working hours, and 1d. for every succeeding day of eight working hours. For every sailing-vessel the charge to be 2d. for first day of

eight working hours, and ½d. for every succeeding day of eight working hours, not exceeding five days. For every vessel occupying a berth outside another vessel, and loading or discharging cargo, ½d. per ton on gross register per day of eight working hours whilst loading or discharging. Ships' dues on vessels detained in port by stress of weather will not be charged after the third day.

WELLINGTON.

Pilotage (optional): Sailing-vessels inwards, 4d. per ton; sailing-vessels outwards, 3d. per ton; steamers inwards, 3d. per ton; steamers outwards, 2d. per ton. Pilotage includes the removal fee to or from the berth at 1d. per ton.

Port charges: 2d. per ton on arrival; not exceeding 6d. in any half-year. Half-yearly days, 1st January and July. Steamers arriving for coal, stores, water, or for receiving or landing mails or passengers and their luggage, which do not come to any wharf or receive or discharge cargo within the port, are exempt from port charges.

Harbourmaster's or berthing fee on vessels of 120 tons and upwards, 1d. per ton; under 120 tons, 10s. Vessels paying pilotage are exempt. Exemption berthage certificates are given to competent masters in the coastal and intercolonial trades, but not to those in foreign trade.

Berthage: None, unless vessels delay discharging or loading for an undue time.

NELSON.

Pilotage (compulsory): Steamers, inwards and outwards, 1d. per registered ton after first call. Sailing-vessels, inwards and outwards, 6d. per ton if tug not employed; 3d. per ton if tug employed. Steamers, in and out, payable yearly, 7d. per registered ton; 400 tons, 3d. per ton annually.

Port charges: For vessels not employing the pilot, 150 tons, 6d. per ton half-yearly; over 150 tons, 1s. per ton half-yearly.

Harbour lights: Payable each arrival, 150 tons, ¼d. per ton; over 150 tons, ½d. per ton.

Harbourmaster's fees: 250 tons, 1d. per ton; over 250 tons, ½d. per ton for each removal.

Berthage, fenders, and warps: Nil.

WESTPORT.

Pilotage: Free (signal-station). Four pilots authorised.

Port charges: Receiving and discharging ships' ballast, 1s. per ton; minimum charge, 20s.; 1d. per ton for use of shoot.

Harbourmaster's fees: Free.

Berthage: Use of wharf, ¼d. per ton per day; minimum charge, 5s.; maximum charge, £5 10s.

GREYMOUTH.

Pilotage: Free (signal-station).

Port charges: Discharging ships' ballast, 6d. per ton.

Harbourmaster's fees: Free.

Berthage: Use of wharf, 6d. per ton net register per trip. Vessels in ballast for coal or timber, 1d. per ton net register for the first four days; maximum, £5 10s.; minimum, 5s.

LYTTELTON.

Pilotage (compulsory): Pilotage, inwards and outwards, sailing-vessels 3½d. per ton; steamers, 2½d. per ton. Free on second call on same voyage.

Port charges: 2d. per ton, quarterly in advance, for vessels of 100 tons and upwards plying within the port or employed in coasting only, not to exceed 6d. per ton in any half-year; 2d. per ton for vessels of 100 tons and upwards not plying within the port or not solely employed in coasting, not to exceed 6d. per ton in any half-year. For exemptions from pilotage and harbour fees, see sections 132, 133, and 134 of "The Harbours Act, 1878."

Harbourmaster's fees: Free.

Berthing charges: None.
Warps (21 in. coir hawsers): £2 per warp for use during a vessel's stay in port, not exceeding six months.
Fenders (soft wood): £1 for first day, and 10s. per day after. 10s. for use of each hardwood fender.

TIMARU.

Pilotage (compulsory): Sailing-vessels, 3d. per ton inwards and outwards; when tug used, 2d. per ton; steamers, 2d. per ton inwards.
Port charges: Coasters, 1½d. per ton each trip; sailing-vessels, not coasters, 3d. per ton each trip; steam-vessels, not coasters, 6d. per ton in cargo worked; in all cases not to exceed 1s. 3d. per ton in any half-year.
Harbourmaster's fees: 1d. per ton each service. This fee is charged to all vessels or steamers not paying pilotage.
Berthage: 3d. per ton on all cargo landed or shipped.
Hawsers and moorings: Vessels at wharves, ½d. per ton register for first seven days; subsequent days, ¼d. per ton. Vessels at buoys, under 800 tons register, ½d. per ton; over 800 tons, $\frac{1}{10}$d. per ton.
Fenders: Sailing-vessels under 500 tons register, 2s. per day; under 1,000 tons, 3s. per day; over 1,000 tons, 4s. per day. Steamers under 1,000 tons register, 4s. per day; under 1,500 tons, 10s. per day; under 2,000 tons, 15s. per day; over 2,000 tons, £1 per day.

OAMARU.

Tonnage rate: On cargo, inwards or outwards—Coal, merchandise, stone, produce, and timber, 8d. per ton; wool, 2s. per ton; frozen sheep, 1d. per carcase; frozen lamb, 1d. per carcase; rabbits and hares, 3s. per ton, gross weight; all other frozen goods 3s. per ton, gross dead weight; live-stock, 1s. 8d. per ton. Note.—Collected in the same manner as berthage dues have been collected.
Warps: ½d. per ton per day for seven days; ¼d. per ton per day thereafter.

OTAGO.

Pilotage (compulsory): Inwards and outwards, sailing-vesssls without tug, 6d. per ton; with tug, 4d. per ton; steamers, 4d. per ton. Foreign steamers calling twice on one voyage only charged once. All vessels holding exemption certificates, one annual pilotage. For every vessel under steam carrying an exempt pilot and employing a Board's pilot the charge shall be ½d. per ton for the Upper Harbour.
Port charges: 6d. per ton half-yearly, all vessels.
Harbourmaster's fees: Vessels less than 120 tons, 10s.; over 120 tons, 1d. per ton.
Berthage: Vessels trading within the port—10 tons, 5s. per quarter; 25 tons, 10s. per quarter; 50 tons, 15s. per quarter; 100 tons, £1 per quarter. Vessels trading beyond the port—Sailing-vessels ½d. per ton (maximum, eighteen days, £10); steam-vessels, ½d. per ton per day. Vessels laid up for less than a month, one-half the above rates; over a month, ½d. per ton per month.
Towage: When assistance is given to steam-vessels under steam, one-fourth usual towage, not exceeding £5 for Upper Harbour, and £7 for Lower Harbour.

BLUFF.

Pilotage (compulsory): Steamers, inwards and outwards, 3½d. per registered ton; sailing-vessels, 5½d. inwards and outwards if tug not employed; 3½d. per registered ton inwards and outwards if tug employed. Sailing-vessels in ballast, 3½d. per registered ton inwards and outwards. Steamers in and out, 7d. per registered ton, payable yearly; sailing-vessels, in and out, 11d. per registered ton, payable yearly.
Port charges: On all vessels, per trip, 2d. per registered ton, or in one sum, half-yearly from date of entry, 6d. per registered ton.
Harbourmaster's fees: Free.

Berthage: Steamers, 2d. per ton net register for the first day, and 1d. per ton per week or part of a week thereafter. Sailing-vessels and hulks of over 50 tons register, 1d. per ton net register per week for the first four weeks, and ¼d. per ton per week thereafter.

WHARFAGE RATES.

Wharfage rates at fourteen of the principal harbours in New Zealand, as on 1st January, 1901 (compiled by Mr. C. Hood Williams, Secretary to the Lyttelton Harbour Board):—

AUCKLAND.

General Merchandise.—2s. per ton imports; 1s. per ton exports.
Transhipments: Half-rates when declared, or 2s. 6d. per ton, including labour and seven days' storage.

Grain and Agricultural Produce.—1s. 6d. per ton landed; 1s. per ton shipped.
Transhipments: Half-rates when declared, or 2s. 6d. per ton, including labour and seven days' storage.

Frozen Meat, Butter, &c.—1s. 6d. per ton landed; 1s. per ton shipped.
Transhipments: Half-rates when declared, or 2s. 6d. per ton, including seven days' storage and labour.

Wool.—6d. per bale, shipped or landed.
Transhipments: If landed, dumped, and re-shipped, 3d. per bale.

Coal.—1s. 3d. per ton landed; 6d. per ton shipped.
Transhipments: Shipped or discharged over side for steamer's use, free.

Timber.—Sawn, 2s. per 1,000 ft. landed; 1s. per 1,000 ft. shipped. Baulk or round (less 12½ per cent.), 1s. per 1,000 ft. landed, 6d. per 1,000 ft. shipped.
Transhipments: Half landing charges when declared, or 2s. 6d. per ton, including labour and seven days' storage.

NOTE.—Wharfage on agricultural produce, frozen meat, coal, &c., was raised 2d. per ton, and on wool 2d. per bale, and timber 1d. per 100 ft., on 1st August, 1899.

GISBORNE.

General Merchandise.—Imports, 5s. to 6d.; exports, 2s. 6d. to 6d. By measurement, from 40 cubic feet to 4 cubic feet; same for weight. Ale, beer, and porter, per gallon—Import, 1½d., export, ½d.; spirits and wine, per ton measurement, 7s. 6d. No export charges on goods that have paid inward wharfage.
Transhipments: Free.

Grain and Agricultural Produce.—Grain—Imports, 5s.; exports, 1s. Grass-seed—Imports, 5s.; exports, 2s. Potatoes—Imports, 5s.; exports, 2s. 6d. (12 sacks).
Transhipments: Free.

Frozen Meat, Butter, &c.—Sheep, 2d. per carcase; lambs, 1d. per carcase; haunches, legs, &c., 2s. 6d. per ton.
Transhipments: Free.

Wool.—1s. 3d. per bale, export.
Transhipments: 3d. per bale if landed. Free if transhipped from vessel.

Coal.—2s. per ton.
Transhipments: Coal for engines and freezing-ships, Outer Harbour, free.

Timber.—Sawn, 4s. per 1,000 ft.; baulk, 1s. per 1,000 ft., imports; 1s., and 6d., per 1,000 ft., exports.
Transhipments: Free.

NAPIER.

General Merchandise.—3s. 6d. to 9d. per ton imports, 2s. to 6d. per ton exports, according to measurement, from 40 cubic feet to 5 cubic feet; 3s. to 9d. per ton imports, 2s. to 6d. per ton exports, by weight, 1 ton to 2¼ cwt.
Transhipments: Quarter import rates, Outer Harbour; half import rates, Inner Harbour.

Grain and Agricultural Produce.—3s. 6d. imports; 1s. 6d. exports. Potatoes, 3s. imports; 1s. 6d. exports.
Transhipments: Quarter import rates, Outer Harbour; half import rates, Inner Harbour.
Frozen Meat, Butter, &c.—Sheep, 2d. per carcase; haunches, 1d., legs, ½d.; lambs, 1d. per carcase, exports or imports. Cased meats, butter, &c., at general merchandise rates.
Transhipments: Quarter import rates, Outer Harbour; half import rates Inner Harbour.
Wool.—1s. per bale, exports only.
Transhipments: 3d. and 6d. per bale if landed for transhipment.
Coal.—2s. 6d. imports; 1s. 3d. exports.
Transhipments: Quarter rates, Outer Harbour; half rates, Inner Harbour. Coal for engines and freezing-ships, Outer Harbour, free.
Timber.—3s. 6d. per 1,000 ft., imports; 1s. 8d. per 1,000 ft. exports.
Transhipments: Half rates, Inner Harbour; quarter rates, Outer Harbour.
NOTE.—Goods other than wool and flax landed on a wharf for transhipment to a vessel lying at another berth, charged inward wharfage only when declared at time of entry.

NEW PLYMOUTH.

General Merchandise.—2s. per ton.
Transhipments: 1s. 6d. per ton.
Grain and Agricultural Produce.—2s. per ton; grass-seed, 2s. (20 sacks).
Transhipments: 1s. 6d. per ton.
Frozen Meat, Butter, &c.—2s. per ton.
Transhipments: 1s. 6d. per ton.
Wool.—6d. per bale; five bales of 4 cwt., 2s. per ton; three bales of over 4 cwt. 2s. per ton.
Transhipments: Three-quarter rates.
Coal.—2s. per ton; brown coal, 1s. 9d., with labour.
Transhipments: Three-quarter rates, with labour.
Timber.—480 ft. per ton, 2s.; 320 ft. per ton (rough or sawn), with labour.
Transhipments: Three-quarter rates.

WANGANUI.

General Merchandise.—Imports, 3s. per ton; exports, 2s. per ton.
Transhipments: Half-rates.
Grain and Agricultural Produce.—Imports, 3s. per ton; exports, 2s. per ton. Potatoes, export, 1s. per ton.
Transhipments: Half-rates.
Frozen Meat, Butter, &c.—Sheep, ½d. per carcase; lambs, ½d. per carcase; legs, shoulders, and loins calculated at so many to a carcase, according to freight.
Wool.—6d. per bale.
Transhipments: Half rates.
Coal.—2s. 6d. per ton. Coal for ship's use, outward, 6d. per ton.
Transhipments: Half-rates.
Timber.—6d. per 100 ft.; for shipment, 2d.; white pine, 1d.
Transhipments: Half rates.

WELLINGTON.

General Merchandise.—2s per ton inwards, including labour and one night's storage. Inward cargo landed after noon on Friday is stored free till noon on following Monday. 1s. per ton outwards, including labour. Railway wharfage—1s. inwards; 6d. outwards, without labour.
Transhipments: 2s. 6d. per ton, including labour and one week's storage. Over side of vessel lying at wharf, 6d. per ton.
Grain and Agricultural Produce.—2s. per ton inwards, including labour and one night's storage; 1s. per ton outwards, including labour. Railway wharfage—1s. inwards; 6d. outwards, without labour.
Transhipments: 2s. per ton, including labour and seven days' storage. Over side of vessel at wharf, 6d. per ton.

Frozen Meat, Butter, &c.—1s. inwards; 1s. outwards, without labour. Railway wharfage—1s. inwards; 6d. outwards, without labour.
Transhipments: Meat, 1s. 3d. per ton, without labour; butter, 2s. 6d. per ton, including labour and storage. Meat, butter, &c., over side of vessel at wharf, 6d. per ton.

Wool.—4d. per bale at Railway Wharf, without labour; 6d. per bale at other wharves, including labour.
Transhipments: 6d. per bale, including labour, and 3d. additional if stored. Over side of vessel to vessel at wharf, 3d. per bale.

Coal.—1s. per ton imports; 6d. per ton exports, without labour. Railway wharfage—1s. per ton inwards; 6d. per ton outwards, without labour.
Transhipments: Across wharf for steamer's use, free. From vessel or hulk to vessel at wharf, free.

Timber.—2d. per 100 ft. inwards; 1½d. per 100 ft. outwards, without labour. If labour supplied, 2d. per 100 ft. added inwards, and 1½d. outwards. Railway wharfage—2d. inwards; 1½d. outwards, without labour.
Transhipments: 2s. 6d. per ton, including seven days' storage and labour; and 6d. over vessel's side into another.

NELSON.

General Merchandise.—2s. per ton, imports and exports, with labour.
Transhipments: Free, when not landed on wharf; 2s. 6d. if landed.

Grain and Agricultural Produce.—1s. 6d. per ton, imports and exports, with labour.
Transhipments: Free, when not landed on wharf; 2s. 6d. if landed.

Frozen Meat, Butter, &c.—None shipped.
Transhipments: Free, when not landed on wharf; half rates if landed.

Wool.—Exports, 1s. per bale; imports free.
Transhipments: Free, when not landed on wharf; half rates if landed.

Coal.—1s. per ton imports; 2s. with labour. Free exports.
Transhipments: 2s. 6d. per ton, with labour. Free, when not landed on wharf.

Timber.—1d. per 100 ft. super., import; 1d. per 100 ft. super., export; 1s. 6d. per ton by measurement, with labour.
Transhipments: Free, when not landed on wharf; half rates if landed on wharf. Re-shipments, 2s. 6d. per ton.

WESTPORT.

General Merchandise.—2s. per ton.
Transhipments: 2s. 6d. per ton, including labour and one week's storage; 1s. per ton if transhipped to vessel or lighter.

Grain and Agricultural Produce.—2s. per ton.
Transhipments: 2s. 6d. per ton, including labour and one week's storage; 1s. per ton if transhipped to vessel or lighter.

Frozen Meat, Butter, &c.—2s. per ton.
Transhipments: 2s. 6d. per ton, including labour and one week's storage.

Wool.—6d. per bale.
Transhipments: 2s. 6d. per ton, including labour and one week's storage; 1s. per ton if transhipped to vessel or lighter.

Coal.—6d. per ton.

Timber.—2d. per 100 ft. If for export and carried by rail, free.

GREYMOUTH.

General Merchandise.—3s. per ton. This charge includes 1s. a ton for receiving and delivering.
Transhipments; 2s. 6d. per ton, including labour and one week's storage; 1s. per ton if transhipped to vessel or lighter.

Grain and Agricultural Produce.—3s. per ton. This charge includes 1s. a ton for receiving and delivering.
Transhipments: 2s. 6d. per ton, including labour and one week's storage; 1s. per ton if transhipped to vessel or lighter.

Frozen Meat, Butter, &c.—3s. per ton. This charge includes 1s. a ton for receiving and delivering.
Transhipments: 2s. 6d. per ton, including labour and one week's storage.
Wool.—6d. per bale.
Transhipments: 2s. 6d. per ton, including labour and one week's storage; 1s. per ton if transhipped to vessel or lighter.
Coal.—6d. per ton.
Timber.—2d. per 100 ft. If for export and carried by rail, free.

LYTTELTON.

General Merchandise.—1s. 6d. per ton.
Transhipments: Free, whether landed on wharf or otherwise.
Grain and Agricultural Produce.—6d. per ton.
Transhipments: Free.
Frozen Meat, Butter, &c.—6d. per ton.
Transhipments: Free, whether landed on wharf or otherwise.
Wool.—6d. per bale.
Transhipments: Free.
Coal.—6d. per ton.
Transhipments: Free, whether landed on wharf or otherwise.
Timber.—3d. per 100 ft.
Transhipments: Free.
N.B.—All re-shipments of goods from Lyttelton under declaration, free.

TIMARU.

General Merchandise.—2s. per ton.
Transhipments: Half rates.
Grain and Agricultural Produce.—1s. 6d. per ton.
Transhipments: Half rates.
Frozen Meat.—½d. per carcase.
Transhipments: Half rates.
Wool.—1s. per bale.
Transhipments: Half rates.
Coal.—2s. per ton.
Transhipments: Half rates. For bunkering purposes, free.
Timber.—4d. per 100 ft.
Transhipments: Half rates.

OAMARU.

General Merchandise.—2s. per ton.
Transhipments: Free.
Grain and Agricultural Produce.—2s. per ton.
Transhipments: Free.
Frozen Meat, Butter, &c.—½d. per sheep. Butter, as merchandise, 2s. per ton.
Transhipments: Free.
Wool.—6d. per bale.
Transhipments: Free.
Coal.—2s. per ton.
Transhipments: Free.
Timber.—5d. and 7d. per 100 ft.
Transhipments: Free.

DUNEDIN.

General Merchandise.—3s., 4s., and 5s. per ton, imports; 9d., 2s., and 3s. per ton, exports. (Classified,)
Transhipments: 2s. per ton.
Grain and Agricultural Produce.—1s. per ton, imports; 1s. 3d. per ton by weight, exports; 9d. per ton on bran and pollard, exports.
Transhipments: 1s. per ton.
Frozen Meat, Butter, &c.—3s. per ton, exports; butter, imports, 4s. per ton; frozen meat, imports, 5s. per ton; sheep and lambs, 1d. per carcase.
Transhipments: 2s. per ton.

Wool.—Exports, 3s. per ton by measurement; 4s. per ton, imports (three bales to ton).
Transhipments: 2s. per ton by measurement.
Coal.—3s. per ton, imports: 9d. per ton, exports.
Transhipments: 2s. per ton.
Timber.—6d. and 3d. per 100 superficial feet, imports; 9d. per ton by measurement, exports.
Transhipments: 2s. per ton by measurement. Notice of transhipment must be given within twenty-four hours after ship's arrival.

BLUFF.

General Merchandise.—1s. 10d. per ton, imports and exports.
Transhipments: Free, when not landed on wharf; half rates if landed.
Grain and Agricultural Produce.—11d. per ton, imports and exports.
Transhipments: Free, when not landed on wharf; half rates if landed.
Frozen Meat, Butter, &c.—11d. per ton, exports; cheese, 1s. per ton.
Transhipments: Free, when not landed on wharf; half rates if landed.
Wool.—Exports, 9d. per bale; imports free.
Transhipments: Free, when not landed on wharf; half rates if landed.
Coal.—1s. 6d. per ton, imports; free exports.
Transhipments: 1s. 6d. per ton when landed ex hulk; free when not landed on wharf.
Timber.—1s. per 1,000 ft. super., import; 1s. per 1,000 ft. super., export.
Transhipments: Free, when not landed on wharf; half rates if landed on wharf.

LIGHTHOUSES.

THE coasts of New Zealand are, considering their extent, fairly well lighted, but there are many places where lights are still required. Additions to the existing lights are made from time to time as funds are available.

There are twenty-nine coastal lights—eight of the first order, fifteen of the second, three of the third, and three of smaller orders, and a second order light is about to be erected on Kahurangi Point, on the west coast of the South Island.

There has been no special difficulty in the erection of lighthouses in New Zealand, apart from the trouble caused by indifferent landings. There are no lighthouses built in the sea, such as the well-known Eddystone or Bell Rock. That on The Brothers is the only one which it is considered necessary to keep as a rock-station: that is, the keepers are relieved from time to time, three being always at the station and one on shore.

The cost of the erection of the lighthouses is given by the Marine Department as about £181,600 (the Ponui Passage Lighthouse, having been built by the Provincial Government of Auckland, the cost is not given). The annual consumption of oil is about 20,000 gallons; and the cost of maintenance, irrespective of the cost of maintaining the lighthouse steamer, is about £13,500 a year.

Besides the coastal lighthouses, there are harbour-lights at most of the ports of the colony for the guidance of vessels into and out of the ports.

The following table shows the names of the lighthouses, indicating also their situation, the order of apparatus, description,

period (in seconds) and colour of the lights, and of what material the respective towers are built:—

Name of Light-house.	Order of Apparatus.	Description.	Period of Revolving Light.	Colour of Light.	Tower built of.
	Dioptric.		Seconds.		
Cape Maria van Diemen	1st order ..	Revolving	60	White	Timber.
	..	Fixed ..	..	Red, to show over Columbia Reef	
Moko Hinou ..	1st „ ..	Flashing	10	White	Stone.
Tiri-Tiri (Auckland)	2nd „ ..	Fixed ..	..	White, with red arc over Flat Rock	Iron.
Ponui Passage..	5th „ ..	„ ..	..	White and red ..	Timber
Cuvier Island ..	1st „ ..	Revolving	30	White	Iron.
East Cape ..	2nd „ ..	„	10	„	„
Portland Island	2nd „ ..	„	30	„ ..	Timber.
	..	Fixed ..	..	Red, to show over Bull Rock	
Cape Palliser ..	2nd „ ..	Flashing	Twice every half-minute, with three seconds intervals between flashes	White	Iron.
Pencarrow Head	2nd „ ..	Fixed ..	..	White	Iron.
Cape Egmont ..	2nd „ ..	„ ..	..	„	„
Manukau Head	3rd „ ..	„ ..	..	„	Timber
Kaipara Head ..	2nd „ ..	Flashing	10	„	„
Brothers (in Cook Strait)	2nd „ ..	„	10	„ ..	„
	..	Fixed ..	..	Red, to show over Cook Rock	
Cape Campbell	2nd „ ..	Revolving	60	White	„
Godley Head (Lyttelton)	2nd „ ..	Fixed ..	..	„	Stone.
Akaroa Head ..	2nd „ ..	Flashing	10	„	Timber.
Moeraki ..	3rd „ ..	Fixed ..	..	„	„
Taiaroa Head ..	3rd „ ..	„ ..	..	Red	Stone.
Cape Saunders..	2nd „ ..	Revolving	60	White	Timber.
Nugget Point ..	1st „ ..	Fixed ..	..	„	Stone.
Waipapapa Point	2nd „ ..	Flashing	10	„	Timber.
	Catadioptric.				
Dog Island ..	1st order ..	Revolving	30	„	Stone.
	Dioptric.				
Centre Island ..	1st order ..	Fixed ..	..	White, with red arcs over inshore dangers	Timber.
Puysegur Point	1st „ ..	Flashing	10	White	„
Cape Foulwind	2nd „ ..	Revolving	30	„	„
Farewell Spit ..	2nd „ ..	„	60	White, with red arc over Spit end	„
Nelson ..	4th „ ..	Fixed ..	..	White, with red arc to mark limit of anchorage	Iron.
French Pass ..	6th „ ..	„ ..	..	Red and white, with white light on beacon	„
Stephens Island	1st „	Group flashing	30	White	„

ANNUAL PENSIONS

PAID BY THE GOVERNMENT OF NEW ZEALAND, AS ON 31ST MARCH. 1901.

[By an Act passed in 1871 the pension system was abolished in New Zealand. In 1893 the Civil Service Insurance Act was passed, the main provisions of which are described at the end of this table.]

Name.	Date from which Pension commenced.	Amount.		
Under "The Civil Service Act, 1866."		£	s.	d.
Andrews, A. ..	1 May, 1896	141	12	0
Arrow, H. ..	1 Aug., 1881	26	0	0
Austin, A. D. ..	1 Oct., 1887	247	10	0
Anderson, J. G...	6 Jan., 1896	261	18	1
Baddeley, H. C...	12 Jan., 1888	225	0	0
Baker, E. ..	1 Nov., 1880	214	17	1
Barnes, G. H. ..	16 Feb., 1896	100	0	0
Batkin, C. T. ..	1 April, 1890	533	6	0
Bertrand, J. R. ..	17 Feb., 1895	135	0	0
Bicknell, F. ..	1 Feb., 1882	96	13	4
Blomfield, J. ..	21 Mar., 1889	101	15	0
Bridson, W. ..	1 Aug., 1893	146	8	7
Brown, W. R. E.	1 Aug., 1892	265	16	8
Burgess, A. ..	1 June, 1886	116	13	4
Burke, J. ..	1 July, 1899	89	0	11
Butts, E. D. ..	1 April, 1893	258	6	8
Campbell, F. E...	1 Mar., 1890	466	13	0
Carrington, O. ..	1 Feb., 1878	300	0	0
Catley, J. T. ..	1 Oct., 1898	223	6	8
Cheesman, W. F.	1 April, 1890	154	15	1
Clarke, H. T. ..	1 Jan., 1879	400	0	0
Clarke, H. ..	1 Oct., 1879	98	13	0
Cook, R. C. ..	1 Sept., 1895	160	14	3
Costall, J. ..	10 July, 1892	131	3	10
Creeke, W. ..	1 April, 1891	52	15	8
Crowe, A. ..	31 Dec., 1885	68	12	3
Culpan, W. ..	1 Dec., 1868	62	10	0
Cunningham, J...	1 Feb., 1888	175	0	0
Dick, S. J. ..	1 Feb., 1893	250	0	0
Dickey, A. J. ..	1 Nov., 1875	122	0	5
Earle, J. ..	13 Nov., 1888	104	10	0
Eliott, G. E. ..	30 Nov., 1872	400	0	0
Elliott, S. ..	1 July, 1898	110	11	4
Falck, F. ..	1 Mar., 1893	125	13	4
Ferguson, J. ..	1 Feb., 1897	195	0	0
Filleul, W. G. ..	16 April, 1896	140	16	8
Freeth, J. J. ..	1 Mar., 1894	116	13	4
Gill, R. J. ..	1 Sept., 1886	228	11	5
Graham, G. H. ..	8 Sept., 1891	52	10	0
Greenway, J. H.	1 Nov., 1891	116	16	0
Giles, J. ..	1 Feb., 1894	238	6	8
Halliday, C. ..	31 Aug., 1886	96	13	4
Hamilton, M. ..	11 July, 1880	200	0	0
Hart, J. T. ..	12 Nov., 1890	193	7	0
Haselden, C. J. A.	1 July, 1896	255	19	1
Heddell, P. ..	17 Oct., 1894	90	0	0
Henn, J. ..	1 April, 1893	88	3	4
Hill, C. J. ..	9 Feb., 1895	72	0	0
Holden, T. ..	13 Oct., 1878	31	5	0
Jackman, S. J. ..	1 May, 1892	149	6	8
Johnson, J. W...	1 May, 1898	78	1	6
Johnston, S. ..	8 June, 1900	173	8	3
Judd, A. ..	1 April, 1887	173	6	8
Keetley, E. ..	1 July, 1884	18	12	10
Kissling, T. ..	1 Jan., 1894	317	5	2
Laing, E. B. ..	1 April, 1887	112	10	0
Laing, W. ..	1 Feb., 1896	212	10	0
Lang, A. ..	1 Feb., 1893	75	15	3
Lemon, C. ..	1 Mar., 1895	350	0	0
Lincoln, R. S. ..	1 Mar., 1889	68	17	0
Lodge, W. F. ..	1 Oct., 1881	185	0	0
Lubecki, A. D. ..	1 April, 1896	200	0	0
Lusher, R. A. ..	31 Aug., 1880	76	16	8
Macdonald, J. ..	1 Nov., 1900	111	0	0
Millar, G. ..	1 Feb., 1896	80	7	0
Miller, F. ..	1 April, 1899	141	13	4
Mitford, G. M. ..	1 Feb., 1869	196	15	0
Monson, J. R. ..	1 Oct., 1882	271	16	0
Monro, H. A. H.	1 Nov., 1880	342	17	2
Morpeth, W. J...	4 Aug., 1894	195	4	9
Morrow, H. ..	1 June, 1890	120	16	8
Macarthur, J. ..	1 Jan., 1876	65	0	0
McCulloch, H. ..	1 Aug., 1890	233	0	0
MacDonnell, R. T.	23 July, 1890	150	0	0
McKellar, H. S...	1 Aug., 1892	433	6	8
Norris, E. F. ..	1 Oct., 1895	88	17	9
Nuttall, J. ..	1 July, 1897	74	13	4
O'Brien, L. ..	1 April, 1896	273	5	0
O'Connor, R. ..	1 Sept., 1892	147	0	6
Parris, R. ..	1 Jan., 1877	314	5	8
Pearson, W. H...	30 Sept., 1884	340	9	6
Phillips, W. M. ..	1 Dec., 1894	69	4	5
Pickett, R. ..	1 Aug., 1866	209	10	6
Pinwill, A. ..	1 July, 1891	120	17	0
Pitt, H. ..	1 May, 1881	100	0	0
Powell, D. ..	1 July, 1893	44	1	8
Rawson, C. E. ..	1 Dec., 1895	244	0	11
Reid, W. S. ..	1 Nov., 1900	500	0	0

ANNUAL PENSIONS—*continued.*

Name.	Date from which Pension commenced.	Amount. £	s.	d.
Under "The Civil Service Act, 1866"—continued.				
Rennell, W. ..	1 Dec., 1895	167	18	4
Rich, E. F. ..	1 June, 1892	217	0	0
Robertson, J. ..	6 Oct., 1892	155	0	0
Rodgerson, W. J.	1 July, 1892	248	6	8
Rowe, C. ..	1 Oct., 1894	109	16	0
Searancke, W. N.	1 Feb., 1879	240	0	0
Shrimpton, J. ..	16 July, 1889	146	14	0
Silvius, H. ..	17 Jan., 1900	72	10	0
Sinclair, A. ..	1 June, 1878	195	0	0
Slater, J. ..	1 April, 1898	223	16	2
Smith, J. ..	1 June, 1894	49	5	6
Smith, S. P. ..	1 Nov., 1900	500	0	0
Smith, T. H. ..	1 July, 1876	371	8	7
Stevens, F. ..	1 Dec., 1892	183	0	0
Stewart, J. T. ..	1 May, 1889	300	0	0
Swingland, P. ..	1 Nov., 1899	96	0	0
Teesdale, F. ..	7 Oct., 1899	118	16	8
Tennant, J. ..	1 Jan., 1901	293	6	8
Thomas, G. W. ..	1 Nov., 1875	38	15	0
Thompson, R. ..	1 Mar., 1896	220	0	0
Tizard, E. F. ..	1 July, 1888	180	19	0
Tovey, J. H. ..	1 April, 1895	77	0	10
Treseder, P. ..	13 Oct., 1897	184	3	4
Tucker, W. ..	31 Dec., 1880	104	13	4
Veal, J. ..	1 Sept., 1885	49	15	3
Veale, J. S. ..	1 Sept., 1887	56	2	10
Von Sturmer, S. ..	1 July, 1895	288	1	11
Wardell, H. S. ..	1 July, 1888	366	13	0
White, W. ..	1 July, 1881	36	5	0
White, W. B. ..	1 July, 1873	375	4	9
Williams, E. M. ..	1 April, 1880	135	0	0
Woon, J. G. ..	1 July, 1892	209	10	6
Wrigg, H. C. W.	1 Aug., 1889	157	2	10
Under "The Hamerton Pension Act, 1891."				
Hamerton, R. C.	11 Sept., 1891	250	0	0
Under "The Meredith and Others Pensions Act, 1870."				
Hamlin, Rhoda B.	— 1865	50	0	0
Under "The Military Pensions Act, 1866."				
Arapera te Reo	1 July, 1870	20	0	0
Brown, M. R. ..	..	75	0	0
Hastings, L. ..	..	55	0	0
Iritona, Hanita	8 Nov., 1868	12	0	0
Marara, Ngakoa	3 Dec., 1860	36	0	0
McDonald, E.	..	36	0	0
Morrison, Ann ..	26 Oct., 1866	36	0	0
Russell, C. ..	..	36	0	0
Adamson, T. ..	(a)	0	2	2*
Beamish, J. G.	(b)	0	1	6*
Corbett, George	(c)	0	2	0*
Crawford, C. F.	..	0	2	0*
Gibbons, M. C. ..	12 Oct., 1869	0	2	2*
Hamblyn, J. ..	1 Oct., 1872	0	2	2*
Hope, E. L. ..	(d)	0	1	6*
Kelly, T. ..	9 April, 1870	0	2	2*
Kershaw, P. ..	9 Aug., 1869	0	1	6*
Lacey, Garrett ..	..	0	2	2*
Lake, T. ..	..	0	2	6*
Lloyd, T. ..	(e)	0	2	0*
McDonnell, W.	..	150	0	0
McDougall, T. R.	1 April, 1898	40	0	0
McKay, G. ..	..	0	1	0*
McMahon, T. ..	(f)	0	2	0*
Ross, Edward O.	17 Nov., 1866	75	0	0
Shanaghan, J. ..	..	0	1	6*
Shepherd, R. ..	(g)	0	2	8*
Timms, W. ..	(h)	0	1	6*
Tuffin, G. ..	..	0	2	2*
Vance, R. ..	8 April, 1870	0	2	2*
Walsh, W. ..	15 Nov., 1866	0	1	6*
Wasley, Edw. O.	(i)	0	2	2*
Williamson, F.	1 June, 1869	0	2	0*
Apera te Keunga	14 May, 1864	0	2	6*

* Per diem.

(a) 1s. 6d. from 25th October, 1869; increased to 2s. 2d., 7th December, 1870.

(b) 1s. from 17th December, 1868, to 17th December, 1869; 1s. 6d. from 17th December, 1869, to 17th December, 1870; 8d. from 17th December, 1870, to 30th September, 1874; increased to 1s. 6d. 1st October, 1874.

(c) 2s. from 5th June, 1867, to 5th June, 1868; 2s. from 5th June, 1868, to 5th June, 1869; permanent from 9th November, 1869.

(d) 1s. 6d. for twelve months, from 26th April, 1869; renewed for twelve months, 1870; renewed for twelve months, 1871; permanent from 12th May, 1872.

(e) 2nd October, 1869; ceased on 9th April, 1870; renewed, 22nd April, 1874.

(f) 1s. 6d. from —, 1867; increased to 2s. from 14th February, 1868.

(g) 1s. for twelve months, from 9th April, 1870; 2s. 8d., permanent, from 1st May, 1871.

(h) 1s. 6d. for twelve months, from 18th October, 1869; 1s. 6d. for twelve months, from October, 1870; permanent, from 5th November, 1871.

(i) 1s. 6d. for eight months, from 20th September, 1869; 2s. 2d. for twelve months, from 11th June, 1870; 2s. 2d. for twelve months, from 11th June, 1871; 2s. 2d. from 11th June, 1872; permanent from 12th June, 1873.

ANNUAL PENSIONS—*continued.*

Name.	Date from which Pension commenced.	Amount.		
		£	s.	d.
Under "The Military Pensions Act, 1866"—continued.				
Karena Ruatani-wha	1 July,.1870	0	1	0*
Matiu Whitiki..	1 April,1885	0	0	6*
Mauparoa ..	1 July, 1867	0	1	0*
Mehaka Kepa ..	2 Aug., 1865	0	0	9*
Pera Taitimu ..	12 Oct., 1869	0	1	0*
Under "The Walsh and Other Pensions Act, 1869."				
Hewett, Ellen A.	10 Feb., 1865	50	0	0

Name.	Date from which Pension commenced.	Amount.		
		£	s.	d.,
Under "The Militia Act Amendment Act, 1862."				
Bending, W. ..	..	0	2	0*
Bilton, F. ..	..	0	2	0*
Cody, W. ..	..	0	1	0*
Dunn, A. J. N...	..	0	2	0*
King, E. M. ..	..	80	0	0
Leaf, R. ..	(k)	0	0	6*
Skinner, W. H.	..	0	2	6*
Vickery, W. ..	..	0	2	0*
Woolfe, T. ..	..	0	2	0*
Under "The Schafer, McGuire, and Others Pensions Act, 1872."				
McGuire, E. ..	29 Sept.,1871	0	1	0*
Russell, W. ..	1 July, 1871	0	1	0*

* Per diem.

(k) 1s. from 10th May, 1865; renewed for twelve months, April, 1866; again renewed for twelve months; 8d. for twelve months, from 1868 to 10th May, 1869; 6d. for twelve months, from May 1869; permanent from 11th May, 1870.

NEW ZEALAND CROSS GRATUITIES (£10 per Annum).

Adamson, Thomas, 7th May, 1869.
Austin, Samuel, 10th March, 1869.
Black, Solomon, 10th March, 1869.
Biddle, Benjamin, 10th March, 1869.
Hill, George, 10th April, 1869.
Lingard, William, 10th March, 1869.
Mace, Francis Joseph, 10th March, 1869.
Maling, Christopher, 10th March, 1869.
Mair, Gilbert, 7th February, 1870.
Preece, George, 10th March, 1869.
Roberts, John Mackintosh, 10th March, 1869.
Rodriguez, Antonio, 10th March, 1869.
Shepherd, Richard, 13th March, 1869.
Smith, Angus, 7th June, 1869.

MISCELLANEOUS PENSIONS.

Pensions of late Provincial Government, Nelson—Mrs. Robinson's three daughters, £100.
Pension to Mrs. Elizabeth Ford, £46; pension of late F. G. Rawson continued to his widow, £45; pension to Aperahama Tahumiraugi for wounds received when in the service of the New Zealand Government, £10.

"THE CIVIL SERVICE INSURANCE ACT, 1893."

THIS Act applies to all Government employés permanently employed, with a few exceptions, and provides that every person appointed under "The Civil Service Reform Act, 1886," shall retire on attaining sixty years of age, except in special cases where the officer is required to serve beyond that age.

The scheme of insurance and pension provided by the Act and the regulations thereunder is as follows :—

A deduction of 5 per cent. is made on the assumed salary of all officers appointed under the Act; all salaries under £150 counting as £100, and those between £150 and £200 counting as £150, &c., until a limit of £800 is reached. This deduction is paid to the Government Insurance Department, and applied to purchase, first, an insurance ceasing at age sixty, of the amount of the assumed salary; and, secondly, such annuity, commencing at age sixty, as the remainder will purchase. By consenting to a small additional deduction the officer can have the assurance converted into one for the whole of life, the premiums ceasing at age sixty.

The following is a table of the benefits corresponding to a deduction of £5 per annum, made by instalments of 8s. 4d. per month :—

Age nearest Birthday.	Combined Benefits, corresponding to a Monthly Deduction of 8s. 4d.				Age nearest Birthday.
	Insurance at Death if before Age 60.	Annuity commencing at Age 60.			
		Payable Yearly.	Payable Half-yearly.	Payable Quarterly.	
	£	£ s. d.	£ s. d.	£ s. d.	
15	100	63 11 1	62 18 2	62 11 8	15
16	100	59 15 9	59 3 6	58 17 4	16
17	100	56 3 10	55 12 4	55 6 8	17
18	100	52 15 3	52 4 6	51 19 0	18
19	100	49 11 10	49 1 8	48 16 8	19
20	100	46 12 7	46 3 2	45 18 4	20
21	100	43 16 5	43 7 6	43 3 0	21
22	100	41 3 5	40 15 0	40 10 8	22
23	100	38 13 0	38 5 2	38 1 0	23
24	100	36 4 9	35 17 6	35 13 8	24
25	100	33 18 8	33 11 8	33 8 4	25
26	100	31 14 10	31 8 4	31 5 0	26
27	100	29 12 9	29 6 8	29 3 8	27
28	100	27 12 10	27 7 2	27 4 4	28
29	100	25 15 2	25 9 10	25 7 4	29
30	100	23 19 6	23 14 8	23 12 0	30
31	100	22 5 9	22 1 2	21 19 0	31
32	100	20 13 6	20 9 4	20 7 0	32
33	100	19 2 11	18 19 0	18 17 0	33
34	100	17 14 1	17 10 6	17 8 8	34
35	100	16 6 8	16 3 4	16 1 8	35
36	100	15 0 9	14 17 8	14 16 0	36
37	100	13 16 2	13 13 4	13 12 0	37
38	100	12 13 0	12 10 4	12 9 0	38
39	100	11 11 2	11 8 10	11 7 8	39
40	100	10 10 5	10 8 2	10 7 0	40

This shows that a cadet appointed at age fifteen would be insured for £100 until age sixty, and that on reaching that age he

would be entitled to an annuity of £63 11s. 1d. If, at age twenty, his salary was increased to £150, a further increase of £50 in the insurance and £23 6s. 3d. in the annuity would be given, making the total insurance £150, and the annuity £86 17s. 4d. per annum; the total insurance and annuity increasing, for each £5 increase in the annual deduction, in the manner shown in the table.

Officers appointed to the Civil Service whose age exceeds forty years at the date of the appointment are specially dealt with, and are only insured for amounts payable at death if able to pass the usual medical examination required by the Insurance Department. The policies or bonuses cannot be assigned or mortgaged, or charged in any way, or taken in execution, while any person assured under the Civil Service Insurance Act remains in the Civil Service. Officers appointed under "The Civil Service Reform Act, 1886," had the option, during the year 1894, of coming under the provisions of this Act in regard to the insurance and annuity.

The following is a list of the number and amount of insurances effected in each year since the coming into operation of the Act:—

Year.	Number of Insurances.	Sum assured.	Annuity payable on attaining Age 60.
		£	£ s. d.
1894	68	11,468	1,982 17 3
1895	47	8,558	2,064 8 8
1896	56	7,102	2,203 0 7
1897	48	6,848	2,045 19 11
1898	41	5,619	1,815 3 5
1899	67	10,253	3,161 4 2
1900	63	9,504	3,490 14 0
	390	59,352	16,763 8 0

Of these, four policies, insuring £556, have become claims by death, thirty-four policies have been lapsed or surrendered, and the holders of ten policies have left the Civil Service, but have elected to continue their policies with the Insurance Department.

The total of these policies on the 31st December, 1900, was 342, insuring, with bonus additions, £51,340, and securing annuities of £14,993 per annum at age sixty.

NEW ZEALAND NEWSPAPERS.

THERE are (January, 1901) 207 publications on the register of newspapers for New Zealand. Of these, 54 are daily papers, 31 are published three times a week, 26 twice a week, 66 once a week, 3 fortnightly, 1 three times a month, and 26 monthly.

The names of the newspapers, with the postal districts and towns in which they are printed, are given in the following list, the second column showing the day or period of publication.

M. signifies morning paper; E. evening paper:—

AUCKLAND.

Auckland—	
Auckland Evening Star (E.)	Daily.
Auckland Weekly News and Town and Country Journal (M)	Saturday
Bible Standard (M.)	Monthly.
Christian Worker	"
Church Gazette (M.)	"
Danica (M.)	Thrice monthly (1st, 10th, 20th).
New Zealand A B C Guide	Monthly.
New Zealand Farmer, Bee and Poultry Journal (M.)	"
New Zealand Graphic, Ladies' Journal, and Youths' Companion	Wednesday.
New Zealand Herald (M.)	Daily.
New Zealand Illustrated Magazine	Monthly.
New Zealand Illustrated Sporting Review and Licensed Victualler's Gazette (M.)	Thursday.
New Zealand Illustrated Tit-Bits (M.)	Saturday.
New Zealand Joyful News	Monthly.
Observer (M.)	Saturday.
Produce Circular and Monthly Report (M.)	Monthly.
Sharland's Trade Journal	Saturday.
Coromandel—	
Coromandel County News (E).	Tuesday, Friday.
Dargaville—	
Wairoa Bell and Northern Advertiser (E.)	" "
Hamilton—	
Waikato Argus (E.)	Daily.
Waikato Times and Thames Valley Gazette (E.)	"
Kawakawa—	
Northern Luminary (E.)	Friday.
Onehunga—	
Manukau and Franklin Mail and Auckland Courier (E.)	"
Manukau County Chronicle (M.)	Saturday.
Weekly Onehunga Independent and District Advertiser (M.)	"
Rotorua—	
Hot Lakes Chronicle (M.)	"
Whangarei—	
Northern Advocate (E.)	Friday.

THAMES.

Karangahake—	
Goldfields Advocate and Ohinemuri County Chronicle (M.)	Tues., Thur., Sat.
Opotiki—	
East Coast Guardian (E.)	Wed., Saturday.
Opotiki Herald, Whakatane County and East Coast Gazette (E.)	Tuesday, Friday.
Paeroa—	
Ohinemuri Gazette (M.)	Wed., Saturday.
Tauranga—	
Bay of Plenty Times and Thames Valley Warden (E.)	Mon., Wed., Fri.
Te Aroha—	
Te Aroha and Ohinemuri News and Upper Thames Advocate (M.)	Tues., Thur., Sat.
Thames—	
Thames Advertiser and Miners' News (M.)	Daily.
Thames Star (E.)	"
Waihi—	
Waihi Chronicle (M.)	Wed., Saturday.
Waihi Miner and Hauraki Goldfield Gazette (E.)	Daily.
Waitekauri—	
Golden Age (E.)	Wed., Saturday.

GISBORNE.

Gisborne—
- Poverty Bay Herald (E.) .. .. .. Daily.
- Telephone (M.) .. .. Wed., Saturday.

NEW PLYMOUTH.

Inglewood—
- Record and Waitara Age (M.) .. .. .. Wed., Saturday.
- Weekly Record (M.) .. .. Saturday.

New Plymouth—
- Budget and Taranaki Weekly Herald (M.) .. .. "
- Daily News (M.) .. .. Daily.
- Taranaki Herald (E.) .. .. "
- Taranaki News (M.) .. .. Saturday.

Opunake—
- Opunake Times (E.) .. .. Tuesday, Friday.

Stratford—
- Egmont Post (E.) .. .. Tues., Thur., Sat.
- Egmont Settler (E.) .. .. Mon., Wed., Fri.

Waitara—
- Waitara Evening Mail and Clifton County Chronicle (E.) " " " "
- Waitara Times and Clifton County Gazette (M.) .. .. " " "

NAPIER.

Dannevirke—
- Bush Advocate (E.) .. .. Tues., Thur., Sat.
- Morning Press (M.) .. .. " " "

Hastings—
- Hastings Standard (E.) .. .. Daily.

Napier—
- Daily Telegraph (E.) .. .. "
- Hawke's Bay Herald (M.) .. .. .. "
- New Zealand Fire and Ambulance Record .. .. Monthly.

Waipawa—
- Waipawa Mail (E.) .. .. Tues., Thur., Sat.

Wairoa—
- Wairoa Guardian and County Advocate (M.) .. .. Tuesday, Friday.

WANGANUI.

Eltham—
- Eltham Argus and Daily Advertiser (E.) .. .. Daily.
- Eltham Guardian; Kaponga, Ngaire, Te Roti, Hawera, Stratford, and Cardiff Advertiser (M.) .. .. Tues., Thur., Sat.

Hawera—
- Egmont Star (M.) .. .. Saturday.
- Hawera and Normanby Star, Patea County Chronicle, and Waimate Plains Gazette (E.) .. .. Daily.

Hunterville—
- Paraekaretu Express, Hunterville, Ohingaiti, Moawhango, and Rata Advertiser (M.) .. .. .. Tuesday, Friday.

Manaia—
- Waimate Witness (E.) .. .. Mon., Wed., Fri.

Mangaweka—
- Mangaweka Mail, and Ohingaiti, Rangiwhaia, Utiku, Taihape, and Moawhango Courier (M.) .. .. Tuesday, Friday
- Settler (M.) .. .. " "

Marton—
- Rangitikei Advocate and Manawatu Argus (E.) .. .. Daily.

Patea—
- Patea County Press (E.) .. .. .. Mon., Wed., Fri.

Raetihi—
- Waimarino Argus and Raetihi, Ohakune, Karioi, Pipiriki, and Upper Wanganui Advocate (M.) .. .. Tuesday.

Wanganui—
Jubilee (M.) .. .. Tuesday.
Wanganui Chronicle and Patea-Rangitikei Advertiser (M.) .. .. Daily.
Wanganui Herald (E.) .. .. "
Weekly Chronicle and Patea-Rangitikei Record (M.) .. Saturday.
Yeoman (M.) .. .. Friday.

WELLINGTON.

Carterton—
Wairarapa Leader (E.) .. .. Mon., Wed., Fri.
Wairarapa Observer, Featherston Chronicle, East Coast Advertiser, and South County Gazette (E.) .. Tues., Thur., Sat.
Eketahuna—
Eketahuna Express and North Wairarapa Courier (E.) .. " " "
Feilding—
Feilding Star (E.) .. .. Daily.
Foxton—
Manawatu Herald (E.) .. .. Tues., Thur., Sat.
Greytown North—
Te Puke ki Hikurangi (E.) .. .. .. Tues., fortnightly.
Wairarapa Standard and Featherston Advocate (E.) .. Mon., Wed., Fri.
Levin—
Manawatu Farmer and Horowhenua County Chronicle (E.) " " "
Masterton—
Wairarapa Daily Times (E.) .. .. .. Daily.
Wairarapa Star (E.) .. .. "
Weekly Star and Wellington District Advertiser (M.) .. Thursday.
Otaki—
Otaki Mail and Horowhenua County and West Coast Advertiser (M.) .. .. Tues., Thur., Sat.
Pahiatua—
Pahiatua Herald (E.) .. .. Mon., Wed., Fri.
Palmerston North—
Manawatu Daily Standard, Rangitikei Advertiser, and West Coast Gazette (E.) .. .. .. Daily.
Manawatu Daily Times (E.) .. .. .. "
Petone—
Hutt and Petone Chronicle (M.) .. .. .. Wednesday.
Wellington—
Advocate (M.) .. .. Tuesday.
Church Chronicle (M.) .. .. Monthly.
Evening Post (E.) .. .. Daily.
Mercantile Record (M.) .. .. Saturday.
New Zealand Craftsman (M.) .. .. .. Monthly.
New Zealand Cyclists' Touring Club Gazette .. .. "
New Zealand Dairyman and Dairy Messenger (E.) .. "
New Zealand Field (M.) .. .. .. Friday.
New Zealand Free Lance (M.) .. .. .. Saturday.
New Zealand Insurance, Finance, and Mining Journal (M.) .. .. Monthly.
New Zealand Mail, Town and Country Advertiser (M) .. Friday.
New Zealand Mines Record (M.) .. .. .. Monthly.
New Zealand Times (M.) .. .. .. Daily.
Register and Property Investors' Guide .. .. Monthly.
Wellington Price Current and New Zealand Trade Review (M) .. .. "
Woodville—
Woodville Examiner (E.) .. .. .. Mon., Wed., Fri.

BLENHEIM.

Blenheim—
Marlborough Daily Times and Town and Country Advertiser (M.) .. .. Daily.
Marlborough Express (E.) .. .. .. "
Havelock—
Pelorus Guardian and Miners' Advocate (M.) .. .. Tuesday, Friday.
Picton—
Marlborough Press, County of Sounds Gazette (M.) .. " "

NELSON.

Brightwater—
Brightwater Independent Chronicle (M.) .. .. Thursday.
Collingwood—
Golden Bay Argus (E.) .. .. "
Nelson—
Colonist (M.) .. .. Daily.
Nelson Evening Mail (E.) .. .. .. "
Takaka—
Takaka News and Collingwood Advertiser (E.) .. Thursday.

WESTPORT.

Charleston—
Charleston Herald, Brighton Times, and Croninville Reporter (M.) .. .. Wed., Saturday
Murchison—
Buller Post (E.) .. .. Tuesday.
Westport—
Buller Miner (M.) .. .. Friday.
Westport News (M.) .. .. Daily.
Westport Times and Evening Star (E.) .. .. "

GREYMOUTH.

Brunnerton—
Brunner News, Blackball Courier, and Grey Valley Advertiser (E.) .. .. Daily.
Greymouth—
Evening Star and Brunnerton Advocate (E.) .. .. "
Grey River Argus (M.) .. .. "
Weekly Argus (M.) .. .. Weekly.
Reefton—
Inangahua Herald and New Zealand Miner (M.) .. Daily.
Inangahua Times and Reefton Guardian (E.) .. .. "

HOKITIKA.

Hokitika—
Hokitika Guardian and Evening Star (E.) .. .. Daily.
Leader (M.) .. .. Saturday.
West Coast Times (E.) .. .. Daily.
Kumara—
Kumara Times and Dillman's and Goldsborough Advertiser (E.) .. .. "
Ross—
Ross and Okarito Advocate and Westland Advertiser (M.) Wed., Saturday.

CHRISTCHURCH.

Akaroa—
Akaroa Mail and Banks Peninsula Advertiser (M.) .. Tuesday, Friday.
Ashburton—
Ashburton Guardian (E.) .. .. .. Daily.
Ashburton Mail, Rakaia, Mount Somers, and Alford Forest Advertiser (M.) .. .. Tues., Thur., Sat.
Ashburton Standard and Farmers' Advocate (M.) .. Mon., Wed., Fri.

Cheviot—	
Cheviot News (M.)	Tuesday, Friday.
Christchurch—	
Canterbury Times (M.)	Wednesday.
Jubilee Gossip (M.)	Saturday.
Lyttelton Times (M.)	Daily.
Mercantile and Bankruptcy Gazette of New Zealand (E.)	Wednesday.
New Zealand Baptist	Monthly.
New Zealand Church News (M.)	"
New Zealand Railway Review	"
New Zealand Schoolmaster (E.)	"
New Zealand War Cry and Official Gazette of the Salvation Army (M.)	Saturday.
New Zealand Wheelman (M.)	Wednesday.
Press (M.)	Daily.
Prohibitionist	Fri., fortnightly.
Spectator (M.)	Tuesday.
Sportsman and New Zealand Cyclist (M.)	Wednesday.
Star (E.)	Daily.
Truth (E.)	"
Weekly Press (incorporating "The Referee") (M.)	Wednesday.
East Oxford—	
Oxford Observer (M.)	Saturday.
Kaikoura—	
Kaikoura Star and North Canterbury and South Marlborough News (E.)	Daily.
Rangiora—	
Rangiora Standard and North Canterbury Guardian (M.)	Wed., Saturday.
Southbridge—	
Ellesmere Guardian (M.)	" "

TIMARU.

Temuka—	
Geraldine Guardian (M.)	Tues., Thur., Sat.
Gladstone Guardian (E.)	Mon., Wed., Fri.
Temuka Leader (M.)	Tues., Thur., Sat.
Timaru—	
Morning Post (M.)	Daily.
South Canterbury Times (E.)	"
Timaru Herald (M.)	"
Waimate—	
Waimate Advertiser (M.)	Saturday.
Waimate Times (M.)	Tues., Thur., Sat.

OAMARU.

Oamaru—	
North Otago Times (M.)	Daily.
Oamaru Mail (E.)	"

DUNEDIN.

Alexandra South—	
Alexandra Herald and Central Otago Gazette (M.)	Thursday.
Balclutha—	
Clutha Leader (M.)	Tuesday, Friday
Free Press (M.)	" "
Clyde—	
Dunstan Times, Vincent County Gazette, and General Goldfields Advertiser (M.)	Friday.
Cromwell—	
Cromwell Argus and Northern Goldfields Gazette (M.)	Tuesday.

Dunedin—	
Evening Star (E.)	Daily.
Farmers' Circular (M.)	Thur., fortn'ly
Katipo	Monthly.
New Zealand Guardian (M.)	"
New Zealand Journal of Education	"
New Zealand Mining and Engineering Journal (M.)	Thursday.
New Zealand Tablet (M.)	Friday.
Otago Daily Times (M.)	Daily.
Otago Witness (M.)	Thursday.
OtagoLiberal and Workman (M)	Saturday
Outlook (M.)	"
Schoolmates	Monthly.
Temperance Standard	"
Trade Review and Farmers' Gazette (M.)	Thursday.
Triad (M.)	Monthly.
Weekly Budget (M.)	Saturday.
Lawrence—	
Tuapeka Times (M.)	Wed., Saturday.
Milton—	
Bruce Herald (M.)	Tuesday, Friday.
Mosgiel—	
Taieri Advocate (M.)	Wed., Saturday.
Naseby—	
Mount Ida Chronicle (E.)	Friday (twice).
Palmerston—	
Palmerston and Waikouaiti Times (M.)	Friday.
Roxburgh—	
Mount Benger Mail (M.)	Saturday.
Tapanui—	
Tapanui Courier and Central Districts Gazette (M.)	Wednesday.

INVERCARGILL.

Arrowtown—	
Lake County Press (E.)	Thursday.
Gore—	
Mataura Ensign (E.)	Tues., Thur., Sat.
Southern Standard (M.)	Tuesday, Friday.
Invercargill—	
Southern Cross (M.)	Saturday.
Southlander (M.)	Friday.
Southland Daily News (E.)	Daily.
Southland Times (M.)	"
Weekly Times (M.)	Friday.
Queenstown—	
Lake Wakatipu Mail (E.)	"
Riverton—	
Western Star and Wallace County Gazette (E.)	Tues., Thur., Sat.
Winton—	
Winton Record and Hokonui Advocate (M.)	Friday.
Wyndham—	
Wyndham Farmer (M.)	Mon., Wed., Fri.
Wyndham Herald (M.)	Tuesday, Friday.

The foregoing towns are arranged according to the postal district in which they are situated.

Taking the provincial districts, Auckland has 40 publications registered as newspapers, Taranaki 11, Hawke's Bay 8, Wellington 48, Marlborough 4, Nelson 13, Westland 8, Canterbury 34, and Otago 41.

THE CUSTOMS TARIFF OF NEW ZEALAND,

Under the Customs and Excise Duties Acts, 1888 and 1895, "The Tobacco Excise Duties Act, 1896," and "The Customs Duties Amendment Act, 1900."

TABLE OF DUTIES.

THE headings of the respective classes in this Table and in the Table of Exemptions are used solely for convenience of classification, and shall not in any way affect the articles specified therein, or be construed to indicate the material of which any such article is made.

The word "iron" includes steel, or steel and iron combined.

Neither steam-engines, nor parts of steam-engines, nor steam-boilers (land or marine) are included in the expression "machines" or "machinery" in either this Table or the Table of Exemptions.

The abbreviaton "n.o.e." means not otherwise enumerated.

In computing "ad valorem" duties the *invoice* value of the goods is increased by 10 per cent.

CLASS I.—FOODS AND ARTICLES FOR HUMAN CONSUMPTION.

Names of Articles and Rates of Duty.

1. Almonds, in shell, 2d. the lb.
2. Almonds, shelled, n.o.e., 3d. the lb.
3. Bacon and hams, 2d. the lb.
4. Biscuits, ships' plain and unsweetened, 3s. the cwt.
5. Biscuits, other kinds, 2d. the lb.
6. Boiled sugars, comfits, lozenges, Scotch mixtures, and sugar-candy, 2d. the lb., including internal packages.
7. Candied peel and drained peel, 3d. the lb.
8. Capers, caraway seeds, catsup, cayenne pepper, chillies, chutney, curry-powder and -paste, fish-paste, gelatine, isinglass, liquorice, olives, 20 per cent. *ad valorem.*
9. Chocolate confectionery, and all preparations of chocolate or cocoa—
   In plain trade packages, 3d. the lb.
   In fancy packages, or in small packages for retail sale, 20 per cent. *ad valorem.*
10. Confectionery n.o.e., 2d. the lb., including internal packages.
11. Currants, 1d. the lb.
12. Fish, dried, pickled, or salted, n.o.e., 10s. the cwt.
13. Fish, potted and preserved, 2d. the lb. or package of that reputed weight, and so in proportion for packages of greater or less reputed weight.
14. Fruit, fresh, viz.:—
    Apples, pears, plums, cherries, peaches, nectarines, medlars, apricots, quinces, tomatoes, 1d. the lb.
    (No duty exceeding ½d. the lb. to be levied on apples and pears from 14th July to 31st December.)
    Currants, raspberries, gooseberries, blackberries, and strawberries, ½d. the lb.
    Lemons, ½d. the lb.
15. Fruits, dried, 2d. the lb.
16. Fruits, preserved in juice or syrup, 25 per cent. *ad valorem.*
17. Fruit-pulp, and partially preserved fruit n.o.e., 1½d. the lb.
18. Fruits preserved by sulphurous acid, 1d. the lb.
19. Glucose, 1d. the lb.
20. Honey, 2d. the lb.
21. Jams, jellies, marmalade, and preserves, 2d. the lb. or package of that reputed weight, and so in proportion for packages of greater or less reputed weight.

22. Jellies concentrated in tablets or powder, 4d. the lb.
23. Maizena and cornflour, ½d. the lb.
24. Meats, potted or preserved, 20 per cent. *ad valorem.*
25. Milk, preserved, 25 per cent. *ad valorem.*
26. Mustard, 2d. the lb.
27. Nuts of all kinds, except cocoa-nuts, 2d. the lb.
28. Oysters, preserved, 2d. the lb. or package of that reputed weight, and so in proportion for packages of greater or less reputed weight.
29. Pearl barley, 1s. the cwt.
30. Peas, split, 2s. the cwt.
31. Pickles, 3s. the imperial gallon.
32. Provisions, n.o.e., 20 per cent. *ad valorem.*
33. Raisins, 1d. the lb.
34. Rice-flour, 6s. the cwt.
35. Sardines, including the oil, 2d. the lb.
36. Sauces, 4s. the imperial gallon.
37. Spices, including pepper and pimento, unground, 2d. the lb.
38. Spices, including pepper and pimento, ground, 4d. the lb.
39. Sugar, ½d. the lb.
40. Treacle and molasses, ½d. the lb.
41. Vegetables, fresh, dried, or preserved, 20 per cent. *ad valorem.*
42. Vinegar, table, not exceeding 6·5 per cent. of acidity,* 6d. the gallon.

Class II.—Tobacco.

43. Cigarettes, not exceeding in weight 2½ lb. per 1,000, 17s. 6d. the 1,000. And for all weight in excess of 2½ lb. per 1,000, 6d. the oz.
44. Cigars, 7s. the lb.
45. Snuff, 7s. the lb.
46. Tobacco, 3s. 6d. the lb.
47. Tobacco, unmanufactured, entered to be manufactured in the colony in any licensed tobacco manufactory, for manufacturing purposes only, into tobacco, cigars, cigarettes, or snuff, 2s. the lb.

Class III.—Alcoholic Beverages, and Materials for Making Same.

48. Ale, beer of all sorts, porter, cider, and perry, the gallon, or for six reputed quart bottles, or 12 reputed pint bottles, 2s. the gallon.
49. Cordials, bitters, and liqueurs, 16s. the liquid gallon.
50. Hops, 6d. the lb.
51. Malt, 2s. the bushel.
52. Rice malt, 1d. the lb.
53. Solid wort, 6d. the lb.
54. Spirits and strong waters, the strength of which can be ascertained by Sykes's hydrometer, 16s. the proof gallon.
    (No allowance beyond 16·5 under proof shall be made for spirits or strong waters of a less hydrometer strength than 16.5 under proof.)
55. Spirits and strong waters, sweetened or mixed, when not exceeding the strength of proof, 16s. the liquid gallon.
56. Spirits and strong waters in cases shall be charged as follows, namely:—
    Two gallons and under, as two gallons; over two gallons and not exceeding three, as three gallons; over three gallons and not exceeding four, as four gallons; and so on for any greater quantity contained in any case.
57. Spirits or strong waters, mixed with ingredients in any proportion exceeding 33 per cent. of proof spirit, and although thereby coming under any other designation, excepting patent or proprietary medicines, or tinctures and medicinal spirits otherwise enumerated, 16s. the liquid gallon.

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*Vinegar exceeding 6·5 per cent. of acidity to be treated as acetic acid.

58. Wine, Australian, containing not more than 35 per cent. of proof spirit verified by Sykes's hydrometer, the gallon, or for six reputed quart bottles, or twelve reputed pint bottles, 5s. the gallon.
59. Wine, other than sparkling and Australian, containing less than 40 per cent. of proof spirit verified by Sykes's hydrometer, the gallon, or for six reputed quart bottles, or twelve reputed pint bottles, 6s. the gallon.
60. Wine, sparkling, 9s. the gallon.

Class IV.—Non-alcoholic Beverages, and Materials for Making Same.

61. Aerated and mineral waters and effervescing beverages, 20 per cent. *ad valorem*.
62. Chicory, 3d. the lb.
63. Chocolate, 3d. the lb.
64. Cocoa, 3d. the lb.
65. Coffee, essence of, 20 per cent. *ad valorem*.
66. Coffee, roasted, 3d. the lb.
67. Syrups; lime- or lemon-juice sweetened; raspberry vinegar, 25 per cent. *ad valorem*.
68. Tea, 2d. the lb.

Class V.—Drugs, Medicines, Chemicals, and Druggists' Sundries.

69. Acid, acetic, n.o.e., containing not more than 30 per cent. of acidity, 1½d. the lb.
    For every 10 per cent. of acidity or fraction thereof additional, ½d. the lb.
70. Acid, tartaric, 1d. the lb.
71. Baking-powder, yeast preparations, and other ferments, 20 per cent. *ad valorem*.
72. Chemicals n.o.e., including photographic chemicals, and glacial acetic acid (B.P. standard), 15 per cent. *ad valorem*.
73. Cream of tartar, 1d. the lb.
74. Drugs and druggists' sundries and apothecaries' wares, n.o.e., 15 per cent. *ad valorem*.
75. Essences, flavouring, spirituous: 15 per cent. *ad valorem* until 1st February, 1896, and thereafter 16s. the liquid gallon.
76. Essences, flavouring, n.o.e., 15 per cent.
77. Eucalyptus oil, in bulk or bottle, 20 per cent. *ad valorem*.
78. Glycerine, refined, 20 per cent. *ad valorem*.
79. Opium, 40s. the lb.
80. Patent medicines, 15 per cent. *ad valorem*.
81. Proprietary medicines, or medicaments, (1) bearing the name of the proprietor on label or package; (2) bearing a prefixed name in the possessive case; (3) n.o.e., prepared by any occult secret or art, 15 per cent. *ad valorem*.
82. Saccharine, except in the form of tabloids or tablets, 1s. 6d. the ounce.
83. Sarsaparilla, 15 per cent. *ad valorem*.
84. Soda, carbonate and bicarbonate, 1s. the cwt.
85. Soda, crystals, 2s. the cwt.
86. Tinctures and medicinal spirits of any recognised pharmacopœia, containing more than 50 per cent. of proof spirit, 1s. the lb.
87. Tinctures and medicinal spirits of any recognised pharmacopœia, containing 50 per cent. proof spirit or less, 15 per cent. *ad valorem*.

Class VI.—Clothing and Textile Goods.

88. Apparel and ready-made clothing, and all articles n.o.e. made up wholly or in part from textile or other piece-goods, 25 per cent. *ad valorem*.

89. Apparel made by British or foreign tailors, dress-, mantle-, or jacket-makers, to the order of residents in the colony, and intended for the individual use of such residents, whether imported by the residents themselves or through an importing firm, 40 per cent. *ad valorem.*
90. Blankets, 20 per cent. *ad valorem.*
91. Collars and cuffs, of paper or other material, 25 per cent. *ad valorem.*
92. Cotton counterpanes, 20 per cent. *ad valorem.*
93. Cotton piece-goods, to include turkey twills, dress prints (hard-spun and plain-woven), where the invoice value does not exceed 4d. the yard; and cotton piece-goods n.o.e., 10 per cent. *ad valorem.*
94. Cotton piece-goods—namely, tapestry; cretonnes; chintz art crêpe, and serges; velveteens, velvets, and plushes, all kinds; damasks; moquette; sateens; linenettes; orepons; crimps; zephyrs; ginghams; turkey twills; prints; printed cottons; piqués; vestings; quiltings, and marcellas; muslins of all kinds; nets; window-nets; hollands, curtains, and blinds; diapers; ticks, including coloured Belgian; towellings; laces, 20 per cent. *ad valorem.*
95. Drapery n.o.e., 20 per cent. *ad valorem.*
96. Feathers, ornamental (including ostrich), and artificial flowers, 25 per cent. *ad valorem.*
97. Forfar, dowlas, and flax sheeting, n.o.e., 20 per cent. *ad valorem.*
98. Furs, 25 per cent. *ad valorem.*
99. Haberdashery n.o.e., 20 per cent. *ad valorem.*
100. Hats of all kinds, including straw hats, also caps, 25 per cent. *ad valorem.*
101. Hosiery n.o.e., 20 per cent. *ad valorem.*
102. Lacé, and laces, n.o.e., 25 per cent. *ad valorem.*
103. Millinery of all kinds, including trimmed hats, caps, and bonnets, 25 per cent. *ad valorem.*
104. Ribbons and crape, all kinds, 25 per cent. *ad valorem.*
105. Rugs, woollen, cotton, opossum, or other, 20 per cent. *ad valorem.*
106. Shawls, 20 per cent. *ad valorem.*
107. Silks, satins, velvets, plushes, n.o.e., composed of silk mixed with any other material, in the piece, 25 per cent. *ad valorem.*
108. Textile piece-goods other than cotton or silk, 20 per cent. *ad valorem.*
109. Umbrellas, parasols, and sunshades, 20 per cent. *ad valorem.*
110. Yarns n.o.e., 20 per cent. *ad valorem.*

Class VII.—Leather and Manufactures of Leather.

111. Boots, shoes, and slippers, n.o.e.; goloshes, clogs, pattens, vamps, uppers, and laces, 22½ per cent. *ad valorem.*
112. Heel-plates, and toe-stiffeners and plates, 22½ per cent. *ad valorem.*
113. Leather—
    Leather belting, and belt-leather, harness, bridle, legging, bag, kip (other than East India), 4d. the lb.
    Buff and split, including satin hides and tweeds, 3d. the lb.
    Cordovan, levanted leather, roans, sheepskins, morocco n.o.e., basils, 3d. the lb.
    Sole-leather, 2d. the lb.
    East India kip, Persians, lambskins and goatskins (dressed other than morocco), kangaroo and wallabi skins (dressed), tan and coloured calf, 2d. the lb.
    Leather n.o.e., 1d. the lb.
114. Leather board or compo, 4d. the lb.
115. Leather bags and leather-cloth bags, n.o.e., 20 per cent. *ad valorem.*
116. Leather, chamois, 20 per cent. *ad valorem.*
117. Leather cut into shapes, 22½ per cent. *ad valorem.*
118. Leather leggings, 22½ per cent. *ad valorem.*
119. Leather manufactures n.o.e., 20 per cent. *ad valorem.*

120. Portmanteaux; trunks; travelling-bags and brief-bags of leather or leather-cloth, 10 in. in length and upwards, and carpet-bags, 25 per cent. *ad valorem.*
121. Saddlery, and harness, whips and whip-thongs, 20 per cent. *ad valorem.*

Class VIII.—Furniture and Household Furnishing.

122. Basket- and wicker-ware n.o.e., not being furniture, 20 per cent. *ad valorem.*
123. Carpets, and druggets; floorcloth; mats, and matting, 20 per cent. *ad valorem.*
124. Desks, 20 per cent. *ad valorem.*
125. Furniture and cabinetware, n.o.e., and other than iron, 25 per cent. *ad valorem.*
126. Furniture-, knife-, and plate-powder and polish, 20 per cent. *ad valorem.*
127. Mantelpieces, other than stone, 20 per cent. *ad valorem.*
128. Upholstery n.o.e., 25 per cent. *ad valorem.*

Class IX.—China, Glass, and Earthen Goods.

129. Bricks, known as firebricks, 20 per cent. *ad valorem.*
130. China, porcelain, and parianware, 20 per cent. *ad valorem.*
131. Drainage pipes and tiles, 20 per cent. *ad valorem.*
132. Earthen flooring and garden-tiles, 20 per cent. *ad valorem.*
133. Earthenware, stoneware, and brownware, 20 per cent. *ad valorem.*
134. Filters, 20 per cent. *ad valorem.*
135. Fireclay, ground, and fireclay goods, 20 per cent. *ad valorem.*
136. Glass, crown, sheet, and common window, 2s. the 100 superficial feet.
137. Glassware; also plate-glass, and glass polished, coloured, and other kinds, n.o.e.; globes and chimneys for lamps, 20 per cent. *ad valorem.*
138. Lamps, lanterns, and lampwick, 20 per cent. *ad valorem.*
139. Plate-glass, bevelled or silvered; mirrors and looking glasses, framed or unframed, 25 per cent. *ad valorem.*

Class X.—Fancy Goods, Musical Instruments, etc.

140. Artificial flies, 25 per cent. *ad valorem.*
141. Cards, playing, 6d. per pack.
142. Clocks, 20 per cent. *ad valorem.*
143. Dressing-cases, 20 per cent. *ad valorem.*
144. Fancy goods, and toys, 20 per cent. *ad valorem.*
145. Fishing tackle, including artificially-baited hooks other than flies, 20 per per cent. *ad valorem.*
146. Jewellery; plate, gold or silver; greenstone, cut or polished, 20 per cent. *ad valorem.*
147. Mouldings in the piece for picture frames, cornices, or ceilings, 15 per cent. *ad valorem.*
148. Musical instruments of all kinds n.o.e., 20 per cent. *ad valorem.*
149. Oil, perfumed, 25 per cent. *ad valorem.*
150. Papier-maché ware, 20 per cent. *ad valorem.*
151. Perfumery n.o.e., 25 per cent. *ad valorem.*
152. Perfumed spirits and Cologne-water: £1 1s. the liquid gallon until the 1st February, 1896, and thereafter £1 10s. the liquid gallon.
153. Photographic goods n.o.e., 20 per cent. *ad valorem.*
154. Pictures, paintings, drawings, engravings, and photographs, framed or unframed; picture- or photograph-frames and -mounts, 20 per cent. *ad valorem.*
155. Platedware, 20 per cent. *ad valorem.*
156. Statues, statuettes, casts, and bronzes, 20 per cent. *ad valorem.*
157. Tobacco-pipes and -cases, cigar- and cigarette-holders and -cases, cigarette-papers and -cases, 25 per cent. *ad valorem.*
158. Toilet preparations n.o.e., 25 per cent. *ad valorem.*

159. Watches, 20 per cent. *ad valorem.*
160. Walking-sticks, 20 per cent. *ad valorem.*

Class XI.—Paper Manufactures and Stationery.

161. Calendars and show-cards, all kinds, 25 per cent. *ad valorem.*
162. Cardboard boxes complete, or cardboard cut and shaped for boxes (including match-boxes), 25 per cent. *ad valorem.*
163. Directories of New Zealand, or of any part thereof; also covers for directories, 25 per cent. *ad valorem.*
164. Handbills, programmes and circulars, playbills and printed posters, 20 per cent. *ad valorem.*
165. Ink, writing, 20 per cent. *ad valorem.*
166. Paper bags, coarse (including sugar-bags), 7s. 6d. the cwt.
167. Paper bags n.o.e., 25 per cent. *ad valorem.*
168. Paper-hangings, 15 per cent. *ad valorem.*
169. Paper wrapping—viz., blue candle, glazed cap, glazed casings, small hand, lumber hand, and tissue, 5s. the cwt.
170. Paper, wrapping, other kinds, including brown, cartridge, and sugar papers, 5s. the cwt.
171. Printing matter relating to patent or proprietary medicines; trade catalogues, price-lists, and fashion-plates of the goods of firms or persons in the colony, 25 per cent. *ad valorem.*
172. Stationery and writing-paper n.o.e., 20 per cent. *ad valorem.*
173. Stationery, manufactured—viz., account-books; manuscript books; bill-head, invoice, and statement forms; printed or ruled paper; counter-books; cheque- and draft-forms; tags; labels; blotting-pads; sketch-books; book-covers; copying letter-books; manifold writers; albums (other than for photographs); diaries; birthday-books; plain or faint-lined ruled books; printed window-tickets; printed, lithographed, or embossed stationery; and Christmas, New Year, birthday, and Easter cards and booklets, 25 per cent. *ad valorem.*
174. Stereotypes and matrices, 25 per cent. *ad valorem.*

Class XII.—Manufactures of Metal.

175. Bicycles, tricycles, and the like vehicles; also finished or partly finished or machined parts of same, n.o.e., including weldless steel tubing cut to short lengths, 20 per cent. *ad valorem.*
176. Boilers, land and marine, 20 per cent. *ad valorem.*
177. Brass cocks, valves, unions, lubricators, and whistles, 20 per cent. *ad valorem.*
178. Brass manufactures, n.o.e., 20 per cent. *ad valorem.*
179. Cartridges (shot), 10- to 24-bore, 1s. 6d. the 100.
180. Cartridge-cases, 9d. the 100.
181. Cartridges n.o.e., 20 per cent. *ad valorem.*
182. Cash-registering machines, 10 per cent. *ad valorem.*
183. Coffin-furniture, 20 per cent. *ad valorem.*
184. Composition-piping, 3s. 6d. the cwt.
185. Copper manufactures n.o.e., 20 per cent. *ad valorem.*
186. Copying-presses, 20 per cent. *ad valorem.*
187. Crab-winches, cranes n.o.e., capstans, and windlasses, 20 per cent. *ad valorem.*
188. Cutlery, 20 per cent. *ad valorem.*
189. Firearms, all kinds, 20 per cent. *ad valorem.*
190. Galvanised-iron manufactures n.o.e., 25 per cent. *ad valorem.*
191. Gasometers, and other apparatus for producing gas; also gas-meters, 10 per cent. *ad valorem.*
192. Gaspipes, iron, 5 per cent. *ad valorem.*
193. Hardware, ironmongery, and holloware, 20 per cent. *ad valorem.*
194. Iron bridges, and iron material n.o.e. for the construction of bridges, wharves, jetties, or patent slips, 20 per cent. *ad valorem.*

195. Iron columns for buildings, and other structural ironwork, 20 per cent. *ad valorem.*
196. Iron doors for safes and vaults, 20 per cent. *ad valorem.*
197. Iron, galvanised corrugated sheets, screws, and nails, 2s. per cwt.
198. Iron galvanised tiles, ridging, guttering, and spouting, 20 per cent. *ad valorem.*
199. Iron gates and gate-posts, staples, standards, straining posts and apparatus, 20 per cent. *ad valorem.*
200. Iron nails, 2s. per cwt.
201. Iron pipes, and fittings for same, including main-cocks, 5 per cent. *ad valorem.*
202. Iron, plain galvanised sheet and hoop, 1s. 6d. the cwt.
203. Iron tanks, exceeding 200 gallons and not exceeding 400 gallons, 10s. each.
204. Iron tanks of and under 200 gallons, 5s. each.
205. Iron work and wire work, 20 per cent. *ad valorem.*
206. Japanned and lacquered metal ware, 25 per cent. *ad valorem.*
207. Lawn-mowers, 20 per cent. *ad valorem.*
208. Lead, in sheets, 1s. 6d. the cwt.
209. Lead piping, 3s. 6d. the cwt.
210. Machinery n.o.e., 20 per cent. *ad valorem.*
211. Machinery, electric, and appliances, 10 per cent. *ad valorem.*
212. Machinery for flour-mills, woollen-mills, paper-mills, rope- and twine-making, dredging, saw-milling, planing, oil-refining, boring; and also machinery for refrigerating or preserving meat, leather-splitting machines and band-knives for same, 5 per cent. *ad valorem.*
213. Manufactures, n.o.e., of metal, or of metal in combination with any other material, 20 per cent. *ad valorem.*
214. Nails n.o.e., 3s. the cwt.
215. Printing machines and presses, 5 per cent. *ad valorem.*
216. Pumps and other apparatus for raising water n.o.e., 20 per cent. *ad valorem.*
217. Railway and tramway plant and materials n.o.e., 20 per cent. *ad valorem.*
218. Sad-irons, 20 per cent. *ad valorem.*
219. Shot, 10s. the cwt.
220. Soda-water machines; also, machines for aerating liquids, 5 per cent. *ad valorem.*
221. Steam-engines and parts of steam-engines n.o.e., 20 per cent. *ad valorem.*
222. Steam-engines, and parts thereof, including the boiler or boilers therefor, imported specially for mining or gold-saving purposes and processes, or for dairying purposes, 5 per cent. *ad valorem.*
223. Tinware, and tinsmiths' furniture n.o.e., 25 per cent. *ad valorem.*
224. Waterworks pipes, iron, 5 per cent. *ad valorem.*
225. Weighbridges and weighing-machines, 20 per cent. *ad valorem.*
226. Wire mattresses and webbing, 20 per cent. *ad valorem.*
227. Zinc tiles, ridging, guttering, piping, 20 per cent. *ad valorem.*
228. Zinc manufactures n.o.e., 25 per cent. *ad valorem.*

Class XIII.—Timber, and Articles made from Timber.

229. Bellows, other than forge, 20 per cent. *ad valorem.*
230. Blocks, wooden tackle, 20 per cent. *ad valorem.*
231. Buckets and tubs, of wood, 20 per cent. *ad valorem.*
232. Carriages, carts, drays, wagons, and perambulators, and wheels for the same, 20 per cent. *ad valorem.*
233. Carriage shafts, spokes, and felloes, dressed; bent carriage timber, n.o.e., 20 per cent. *ad valorem.*
234. Doors, glazed with ornamental glass, 4s. each.
235. Doors, plain, 2s. each.
236. Sashes, glazed, with ornamental glass, 4s. the pair.
237. Sashes, plain, 2s. the pair.
238. Timber, palings, 2s. the 100.
239. Timber, posts, 8s. the 100.

240. Timber, rails, 4s. the 100.
241. Timber, sawn, dressed, 4s. the 100 ft. superficial.
242. Timber, sawn, rough, 2s. the 100 ft. superficial.
243. Timber, shingles and laths, 2s. the 1,000.
244. Woodenware and turnery n.o.e, and veneers, 20 per cent. *ad valorem.*

CLASS XIV.—OILS, PAINTS, ETC.

245. Axle-grease, and other solid lubricants, 20 per cent. *ad valorem.*
246. Harness oil and composition, and leather dressing, 20 per cent. *ad valorem.*
247. Naphtha, 6d. the gallon.
248. Oil, linseed, 6d. the gallon.
249. Oil, mineral, including shale-waste or unrefined mineral-oil n.o.e., 6d. the gallon.
250. Oil n.o.e., 6d. the gallon.
251. Oil, olive, in bulk, 6d. the gallon.
252. Oil vegetable, in bulk, n.o.e., 6d. the gallon.
253. Oil vegetable or other, in bottle, 15 per cent. *ad valorem.*
254. Paints and colours ground in oil or turpentine, 2s. 6d. the cwt.
255. Paints and colours mixed ready for use, 5s. the cwt.
256. Putty, 2s. the cwt.
257. Stearine, 1½d. the lb.
258. Stearine for match-making, ¾d. the lb.
259. Varnish; enamel paints; gold size, 2s. the gallon.
260. Whiting and chalk, 1s. the cwt.

CLASS XV.—AGRICULTURAL AND FARM PRODUCTS, ETC.

261. Animals, food for, of all kinds, n.o.e., 20 per cent. *ad valorem.*
262. Cattle (horned), 10s. each.
263. Chaff, £1 the ton.
264. Grain—namely, barley, 2s. the 100 lb.
265. Grain and pulse of every kind n.o.e., 9d. the 100 lb.
266. Grain and pulse of every kind, when ground or in any way manufactured, n.o.e., 1s. the 100 lb.
267. Horses, £1 each.
268. Linseed, £1 the ton.
269. Maize, 9d. the 100 lb.
270. Onions, £1 the ton.
271. Prepared calf-meal, £1 5s. the ton.

CLASS XVI.—MISCELLANEOUS.

272. Bags, flour, 20 per cent. *ad valorem.*
273. Bags, calico, forfar, hessian, and linen, 20 per cent. *ad valorem.*
274. Bagging and bags n.o.e., 15 per cent. *ad valorem.*
275. Blacking and boot-gloss, 20 per cent. *ad valorem.*
276. Blacklead, 20 per cent. *ad valorem.*
277. Blue, 2d. the lb.
278. Brooms, brushes, and brushware, n.o.e., 25 per cent. *ad valorem.*
279. Brushes, hair, and combs; toilet- clothes- and hat-brushes, 20 per cent. *ad valorem.*
280. Candles, 1d. the lb. or package of that reputed weight, and so in proportion for packages of greater or less reputed weight.
281. Cement, 2s. the barrel.
282. Cordage and rope, n.o.e., 20 per cent. *ad valorem.*
283. Cork, cut, including bungs, 20 per cent. *ad valorem.*
284. Fireworks n.o.e., 20 per cent. *ad valorem.*
285. Flock, 10 per cent. *ad valorem.*
286. Glue and size, 1½d. the lb.
287. Granite, sawn on not more than two sides, and not dressed or polished, 5 per cent. *ad valorem.*

288. Marble, granite, and other stone, dressed or polished, and articles made therefrom, including mantelpieces, 25 per cent. *ad valorem.*
289. Matches—
Wooden, in boxes containing not more than 60 matches, 1s. the gross of boxes.
In boxes containing over 60 and not more than 100 matches, 2s. the gross of boxes.
In boxes containing more than 100 matches, for every 100 matches or fraction thereof contained in one box, 2s. the gross of boxes.
Wax, "plaid vestas" in cardboard boxes containing under 100 matches, 1s. the gross of boxes.
"Pocket vestas" in tin or other boxes containing under 100 matches, 1s. 4d. the gross of boxes.
"Sportsman's," "Ovals," and "No. 4 tin vestas," in boxes containing not more than 200 matches, 4s. 6d. the gross of boxes.
Wax, other kinds, for every 100 matches or fraction thereof contained in one box, 2s. 3d. the gross of boxes.
290. Nets and netting, 20 per cent. *ad valorem.*
291. Paraffin wax, ¾d. the lb.
292. Powder, sporting, 6d. the lb.
293. Sacks, other than cornsacks and jute sacks, 15 per cent. *ad valorem.*
294. Sausage-skins and casings (including brine or salt), 3d. per lb.
295. Soap, common yellow, and blue mottled, 5s. the cwt.
296. Soap, n.o.e., 25 per cent. *ad valorem.*
297. Soap-powder, extract of soap, dry soap, and soft-soap, 20 per cent. *ad valorem.*
298. Spirits, methylated, 1s the liquid gallon.
299. Spirits, cleared from warehouse, methylated, under prescribed conditions, 6d. the liquid gallon.
300. Starch, 2d. the lb.
301. Tarpaulins, tents, rick- and wagon-covers, 20 per cent. *ad valorem.*
302. Twine n.o.e., 20 per cent. *ad valorem.*
303. Washing-powder, 20 per cent. *ad valorem.*
304. Wax, mineral, vegetable, and Japanese, 1½d. the lb.

In addition to any duty chargeable by law on any goods imported into the colony, a further duty of 20 per cent. *ad valorem* shall be charged when the goods are prison-made.

TABLE OF EXEMPTIONS FROM DUTIES OF CUSTOMS.

CLASS I.—FOODS, ETC.

Names of Articles.

305. Almonds, Barbary, Sicily, and French, used in confectioners' manufactures.
306. Anchovies, salted, in casks.
307. Arrowroot, sago, tapioca, macaroni, vermicelli, and prepared groats.
308. Salt.
309. Rice, dressed or undressed.
310. Rice manufactured into starch in bond.

CLASS IV.—NON-ALCOHOLIC BEVERAGES, ETC.

311. Cocoa-beans.
312. Coffee, raw.

CLASS V.—DRUGS, ETC.

313. Acids—viz.: boracic; carbolic, in bulk; fluoric; muriatic; nitric; oxalic; oleic; picric; pyrogallic; salicylic; sulphuric.
314. Concentrated extracts or essences in liquid form or preserved in fat for perfume-manufacturing purposes in manufacturing warehouses, in bottles of not less than 1 lb. in weight.

315. Disinfectants.
316. Drugs and chemicals—viz.: alum; sulphate of aluminium; sulphate of ammonia; anhydrous ammonia; aniline dyes; arsenic; bluestone, or sulphate of copper; borax; catechu; chloride of calcium; nitrate of silver; cochineal; creosote, crude or commercial; glycerine, crude; gum, arabic and tragacanth; gum benzoin; artificial gum arabic; gum damar; phosphorus; potash, caustic potash, and chlorate of potash; pearlash; prussiate of potash; cyanide of potassium; cyanide of sodium; liquid chlorine; sal-ammoniac; saltpetre; acetate of soda, crude; soda-ash; caustic soda; nitrate of soda; silicate of soda; sulphate of soda; sulphide of sodium; hyposulphite of sodium; strychnine; sulphur; chloride of zinc; iron-sulphates; gall-nuts; turmeric; saffron; nitrous-oxide gas; tree-washes; insecticides; maltine; chlorodyne.
317. Essential oils, except eucalyptus; cod-liver oil; oil of rhodium.
318. Horse-drenches.
319. Medicinal barks, leaves, herbs, flowers, roots and gums.
320. Scrub-exterminator.
321. Sheep-dip; sheep-drenches; sheep-licks.
322. Surgical and dental instruments and appliances.
323. Scientific and assay balances, retorts, flasks, and other appliances for chemical analysis and assay work.
324. Water-hardening chemicals for brewers' use.

Class VI.—Clothing and Textiles.

325. Accoutrements for military purposes, excepting uniform clothing.*
326. Brace-elastic and brace-mountings.
327. Bunting, in the piece.
328. Butter- and cheese-cloth.
329. Buttons, tapes, wadding, pins, needles.
330. Calico, white and grey, also cotton sheetings, in the piece.
331. Corduroy, moleskin, and plain beaver-skin, of cotton, in the piece.
332. Coloured cotton shirtings; flannelette shirtings.†
333. Forfar, dowlas, and flax sheeting, when cut up under supervision in sizes not exceeding 47 in. x 36 in. for making flour-bags, and not exceeding 54 in. for lining wool mats.
334. Fur-skins, green or sun-dried.
335. Gold or silver lace or braid for military clothing.
336. Hatmakers' materials—viz.: silk plush; felt hoods; shellac; galloons; calicoes; spale-boards for hat-boxes; leathers and linings; blocks; moulds; frames; ventilators; and tassels.
337. Hessians, plain or striped, and scrim.
338. Leather-cloth.
339. Minor articles (required in the making-up of apparel, boots, shoes, hats, caps, saddlery, umbrellas, parasols, and sunshades), enumerated in any order of the Commissioner, and published in the *Gazette*.
340. Sailcloth, canvas, and unbleached double-warped duck, in the piece.
341. Sewing cottons, silks, and threads; crochet, darning, and knitting cottons; angola mendings not exceeding 45 yards, on cards.
342. Silk for flour-dressing.
343. Silk twist (shoemakers' and saddlers').
344. Staymakers' binding, eyelets, corset-fasteners, jean, ticks, lasting, sateen, and cotell.

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* Subject to the provisions of section 28 of "The Defence Act, 1900," as follows:—

Equipments to be admitted free of Customs Duty.

28. All military clothing, saddlery, and equipments imported into the colony for the *bonâ fide* use of a Volunteer corps shall, on the certificate in writing of the Minister of Defence that the same are or have been imported for such purpose, be admitted into the colony free of Customs duty.

† See note on page 92.

345. Tailors' trimmings—viz.: plain-coloured imitation hair-cloth; canvas; plain Verona and plain diagonal, and such patterns of checked Italian cloth as may be approved of by the Commissioner of Customs; Italian cloth of cotton or wool; buckram; wadding and padding; silk, worsted, and cotton bindings and braids; stay-bindings; Russia braids; shoulder-pads; buckles; silesias; drab, slate, and brown jeans; pocketings; slate, black, and brown dyed unions and linens.
346. Umbrella-makers' materials—viz.: reversible and levantine silk mixtures, gloria, and satin de chêne of not less than 44 in. in width; alpaca cloth, with border; zanella cloth, with border; also other piece-goods on such conditions as the Commissioner may approve; sticks, runners, notches, caps, ferrules, cups, ribs, stretchers, tips, and rings.
347. Union shirtings the invoice value of which does not exceed 6d. the yard.*
348. Waterproof material in the piece.

Class VII.—Leather, and Articles used in Leather Manufactures.

349. Boot elastic.
350. Bootmakers' linings, canvas, plain or coloured, bag and portmanteau linings, of such materials, qualities, and patterns as may be approved by the Commissioner.
351. Boots, shoes, and slippers—viz., children's, No. 0 to 3.
352. Cork soles, and sock soles.
353. East India kip, crust or rough-tanned, but undressed.
354. Goatskins, crust or rough-tanned, but undressed.
355. Grindery, except heel- and toe-plates.
356. Hogskins.
357. Kangaroo-, wallabi-skins, undressed.
358. Leather, japanned or enamelled; goatskins, dressed as morocco, coloured (other than black).
359. Saddle-trees.
360. Saddlers' ironmongery (except bits and stirrup-irons), hames, and mounts for harness; straining, surcingle, brace, girth, and roller webs; collar-check, and the same article plain, of such quality as may be approved by the Commissioner; legging-buckles.
361. Tanning materials, crude.

Class VIII.—Furniture, etc.

362. Blind-webbing and tape.
363. Upholsterers' webbing, hair-seating, imitation hair-seating; curled hair; gimp and cord of wool, cotton, or silk; tufts, and studs.

Class IX.—China, Glass, etc.

364. Bottles, empty, plain glass, not being cut or ground; also, jars up to 3 in. in diameter at the mouth.
365. Glass plates (engraved) for photo-lithographic work.
366. Jars or other dutiable vessels, containing free goods or goods subject to a fixed rate of duty, and being ordinary trade packages for the goods contained in them.

Class X.—Fancy Goods, etc.

367. Action-work and keys, in frames or otherwise, for manufacture of organs, harmoniums, and pianos; organ-pipes and stop-knobs.
368. Artists' canvas, colours, brushes, and palette knives.

* Whenever any dispute arises as to the application of the exemption in favour of coloured cotton, flannelette, or union shirtings, in the case of fabrics alleged to be such shirtings, the Commissioner has power to decide such dispute; and in case of doubt on his part, he may require the fabric in dispute to be cut up for shirt-making, under such conditions as he prescribes.

369. Magic-lanterns, lenses, and slides.
370. Microscopes and astronomical telescopes, and lenses for same.
371. Musical instruments, specially imported for Volunteer bands.
372. Paintings, statuary, and works of art, presented to or imported by any public institution or art association registered as a body corporate, for display in the buildings of such institution or association, and not to be sold or otherwise disposed of.
373. Photographic cameras and lenses.
374. Photographs of personal friends in letters or packets.
375. Precious stones, cut or uncut and unmounted.
376. Sensitized surfaces for photographic purposes.

CLASS XI.—PAPER, ETC.

377. Bookbinders' materials—viz., cloth, leather, thread, headbands, webbing, end-papers, tacketing-gut, marbling-colours, marble-paper, blue paste for ruling-ink, staple presses, wire-staples, staple-sticks.
378. Butter-paper, known as parchment paper or waxed paper.
379. Cardboard and pasteboard, of sizes not less than that known as "royal."
380. Cardboard boxes, material for—viz., gold and silver paper, plain and embossed, gelatine and coloured papers, known as "box-papers."
381. Cartridge-paper for drawing-books.
382. Cloth-lined boards, not less than "royal."
383. Cloth-lined papers, enamelled paper; ivorite and gelatine; metallic paper, not less than "demy."
384. Copy-books and drawing-books.
385. Copying-paper, medium and double-foolscap, in original mill wrappers and labels.
386. Hand-made cheque-paper.
387. Ink, printing.
388. Masticated para.
389. Millboard, and bookbinders' leather-board.
390. Paper, hand-made or machine-made book or writing, of sizes not less than the size known as "demy," when in original wrappers.
391. Printing-paper.
392. Printed books, papers, and music, n.o.e.
393. School slates, and educational apparatus.

CLASS XII.—METALS.

394. All machinery for agricultural purposes, including chaff-cutters, corn-crushers; corn-shellers, also articles used in manufacturing the same—viz., chaff-cutting knives, tilt-rakes, fittings for threshing-mills, forgings for ploughs.
395. All agricultural implements.
396. All bolts and nuts, blank or screwed nuts, black or finished nuts.
397. Anchors.
398. Artificers' tools.
399. Axes and hatchets; spades, shovels, and forks; picks; mattocks; quartz and knapping-hammers; scythes, sheep-shears, reaping-hooks; soldering-irons; paperhangers' scissors; butchers' saws and cleavers.
400. Axles, axle-arms, and boxes.
401. Band-saws and folding-saws, including frames.
402. Bellows-nails.
403. Bicycles and tricycles, fittings for—viz., rubber-tires, pneumatic-tires, outside covers, and inner tubes; rubber and cork handles, and pedal-rubbers; also drop-forgings and stampings, ball-bearings, weldless steel tube in full lengths, rims, forks, and spokes, in the rough.
404. Blacksmiths' anvils, forges, and fans.
405. Blowers.
406. Brass and copper, in pigs, bars, tubes, or sheets.

407. Brass tubing and stamped work, in the rough, for gasaliers and brackets.
408. Caps, percussion.
409. Card-clothing for woollen-mills.
410. Chain pulleys, and chains for same.
411. Chains, trace and plough chains; or metal articles required to repair or complete riding or driving harness or saddlery to be repaired or made in the colony.
412. Chamfering, crozing and howelling machine for cask-making.
413. Copper and composition, rod, bolts, sheathing, and nails.
414. Couch-roll jackets, machine-wires, beater-bars, and strainer-plates for paper-mills.
415. Crucibles.
416. Emery-grinding machines and emery-wheels.
417. Empty iron drums, not exceeding 10 gallons capacity.
418. Engineers', boilermakers', brass-finishers', smiths', and all metal- and wood-workers' machine and hand tools.
419. Engine governors.
420. Eyelets.
421. Fire-engines, including Merryweather's chemical fire-engines.
422. Fish-hooks.
423. Galvanising-baths, welded.
424. Gas-engines and hammers, and oil-engines.
425. Glassmakers' moulds.
426. Hydraulic cranes.
427. Iron- and brass-wove wire and wire gauze; also wire netting.
428. Iron boiler-plates and unflanged end-plates for boilers; boiler-tubes not exceeding 6 in. in diameter, and unflanged; Bowling's expansion rings; furnace-flues.
429. Iron, plain black sheet, rod, bolt, bar, plate, hoop, and pig.
430. Iron rolled girders.
431. Iron plates, screws, and castings for ships.
432. Iron wire n.o.e., including fencing-wire, plain and barbed.
433. Lead, in pigs and bars.
434. Locomotives.
435. Machine saws.
436. Machinery exclusively for the purpose of the manufacture of beet-root sugar.
437. Machinery for dairying purposes.
438. Machinery of every description for mining purposes, including machine pumps, but not including machinery for dredging.
439. Machinery for gold-saving purposes and processes.
440. Metal fittings for trunks, portmanteaux, travelling-bags, leggings, bags, and satchels.
441. Metal sheaves for blocks.
442. Metallic capsules.
443. Perambulators and the like vehicles, fittings for n.o.e.
444. Perforated or cellular sheet zinc or iron.
445. Portable engines on four or any greater number of wheels, with boiler of locomotive type; also traction-engines.
446. Printing type and materials n.o.e.
447. Rails for railways and tramways.
448. Reapers and binders, and reaping and mowing machines, and extra parts for same; materials for manufacturing agricultural machinery, namely, reaper-knife sections, fingers, brass and steel springs, malleable castings, discs for harrows, mould-boards and plough-shares, mould-board plates, and steel-share plates cut to pattern, skeith-plates; ploughs and harrows; combined threshers.
449. Riddles and sieves.
450. Rivets and washers.
451. Separators and coolers for dairying purposes.
452. Set-screws, engineers' studs, and split-pins.

453. Sewing-, knitting-, and kilting-machines.
454. Spiral springs (except sofa- and mattress-springs).
455. Steam and hydraulic pressure and vacuum gauges.
456. Steel rams, black or finished, for hydraulic cranes or jiggers.
457. Surveyors' steel bands and measuring-tapes.
458. Swords.
459. Tacks of all kinds.
460. Tea-packing lead.
461. Tin, in pigs, bars, or sheets.
462. Tinsmiths' fittings, including stamped or blocked tin, planished or unplanished.
463. Tins, tops of, ornamented.
464. Welded and flanged boiler-furnaces, plain or corrugated.
465. Wire, of brass, copper, or lead.
466. Zinc, plain sheet.
467. Zinc plates and copper plates for photo-lithographic work.

CLASS XIII.—TIMBER, ETC.

468. Ash, hickory, and lancewood timber, unwrought.
469. Blacksmiths' bellows.
470. Brush woodware.
471. Carriage- and cart-shafts, spokes and felloes in the rough; hubs, of all kinds; poles if unbent and unplaned, of all kinds; bent wheel-rims.
472. Carriage- and cart-makers' materials—viz.: springs, mountings, trimmings, brass hinges, tire-bolts, shackle-holders, step treads, and other iron fittings (except steps, lamp-irons, dash-irons, seat-rails, and fifth wheels), rubber-cloth.
473. Churns.
474. Lignum-vitæ.
475. Sieves, hair.
476. Wooden handles for tools.

CLASS XIV.—OILS, ETC.

477. Benzine in bulk.
478. Oils—viz.: candlenut, fish, kerosene, penguin, palm, seal, whale.
479. Paints and colours n.o.e.
480. Shale oil, once run, suitable for gas-making.
481. Spirits of tar.
482. Turpentine, driers, and terebene.

CLASS XV.—MISCELLANEOUS.

483. Apparatus and appliances solely for teaching purposes, as may be approved by the Commissioner.
484. Bags made of New Zealand tow or flax.
485. Belting for machinery, other than leather.
486. Binder-twine.
487. Bricks, other than fire-bricks.
488. Building materials n.o.e.
489. Brushes for cream-separators and combined screens.
490. Candlenuts and candlenut kernels.
491. Candle-wick.
492. Canvas aprons and elevators for reapers and binders.
493. Carpenters' baskets.
494. Charts and maps.
495. Confectioners' moulding-starch.
496. Cotton waste.
497. Dye-stuffs and dyeing materials, crude.
498. Felt sheathing.

499. Food preservative n.o.e.
500. Gum boots.
501. Hawsers of 12 in. and over.
502. Honey and brown Windsor soap composition.
503. Iron and steel cordage.
504. Jute bagging, bags, and sacks.
505. Manures.
506. Marble, and other stone, hewn or rough sawn, not dressed or polished.
507. Netmakers' cotton twine.
508. Official supplies for consular officers of countries where a similar exemption exists in favour of British Consuls.
509. Papermakers' felts.
510. Passengers' baggage and effects, including only wearing-apparel and other personal effects that have been worn or are in use by persons arriving in the colony; also implements, instruments, and tools of trade, occupation, or employment of such persons; and household or other effects not exceeding £100 in value, which have been in use for twelve months prior to embarkation by the persons or families bringing them to the colony, and not intended for any other person or persons or for sale; also cabin-furnishings belonging to such persons.
511. Plaster of Paris.
512. Powder, blasting and meal.
513. Ship-chandlery n.o.e.
514. Ships' rockets, blue-lights, and danger-signals.
515. Spirits for manufacturing perfumed spirit, flavouring essences, and culinary essences in manufacturing warehouses. This exemption to cease on the 1st day of February, 1896.
516. Stones, mill- grind- oil- and whet-.
517. Tobacco for sheepwash or for insecticide, after being rendered unfit for human consumption to the satisfaction of the Commissioner.
518. Treacle or molasses, mixed with bone-black in proportions to the satisfaction of the Commissioner.
519. Tubular woven cotton-cloth in the piece, for meat wraps.
520. Type-writers.
521. Wax, bottling.
522. Woolpacks and woolpockets.
523. Yarn—viz.: coir, flax, hemp.
524. Articles and materials (as may from time to time be specified by the Commissioner) which are suited only for, and are to be used solely in, the fabrication of goods within the colony. All decisions of the Commissioner in reference to articles so admitted free to be published from time to time in the *Gazette*.
525. And all articles not otherwise enumerated.

Table of Excise Duties.

526. Tobacco, 1s. the lb.*
527. Cigars, cigarettes, and snuff, 1s. 6d. the lb.*
528. Beer, 3d. the gallon.

* "The Tobacco Excise Duties Act, 1896," section 2, enacts:—

"On and after the thirty-first day of December, one thousand eight hundred and ninety-six, section three of "The Customs and Excise Duties Act, 1891," shall be deemed to be repealed, and in lieu of the duties imposed by that section there shall be levied, collected, and paid, on and after that day, upon tobacco manufactured in the colony, at the time of making the entry for home consumption thereof, the several duties of excise following, that is to say —

"On tobacco	One shilling the pound.
"On cigars and snuff	One shilling and sixpence the pound.
"On cigarettes—	
If manufactured by machinery	Two shillings and sixpence the pound.
If made by hand	One shilling the pound."

529. Articles in which spirit is a necessary ingredient, manufactured in a warehouse appointed under section 26 of "The Customs Laws Consolidation Act, 1882," namely—
Pharmacopœia tinctures, essences, extracts, and medicinal spirits containing more than 50 per cent. of proof spirit, 9d. the lb.
Pharmacopœia tinctures, essences, extracts, and medicinal spirits containing less than 50 per cent. of proof spirit, 3d. the lb.
Culinary and flavouring essences, 12s. the liquid gallon, from 1st February, 1896.
Perfumed spirit, 20s. the liquid gallon, from 1st February, 1896.
Toilet preparations which are subject to 16s. the liquid gallon on importation, 12s. the liquid gallon.
Toilet preparations which are subject to 25 per cent. duty on importation, 6s. the liquid gallon.

Duties imposed by His Excellency the Governor under Section 17 of "The Customs and Excise Duties Act, 1888."

530. Olive stones, ground (see *New Zealand Gazette*, 15th May, 1890), 4d. the lb.
531. Brewers' caramel (see *New Zealand Gazette*, 21st August, 1890), 3d. the lb.
532. Liquid hops (see *New Zealand Gazette*, 21st December, 1893), 6s. the lb.
533. The United Asbestos Patent Salamander Decorations (see *New Zealand Gazette*, 14th May, 1896), 15 per cent. *ad valorem*.
534. Matches of any material other than wood or wax, a duty corresponding to the duty payable on wooden matches (see *New Zealand Gazette*, 27th April, 1899).
535. Fibre conduit pipes and fittings for same (see *New Zealand Gazette*, 4th May, 1899), 5 per cent. *ad valorem*.
536. Caramel cereal (see *New Zealand Gazette*, 8th June, 1899), 1d. the lb.

FEES PAYABLE UNDER LAND TRANSFER ACT.

FEES PAYABLE TO DISTRICT LAND REGISTRARS UNDER "THE LAND TRANSFER ACT, 1885."

	£	s.	d.
For the bringing land under the provisions of this Act (over and above the cost of advertisements)—			
When the title consists of a Crown grant, and none of the land included therein has been dealt with	0	2	0
When the title is of any other description and the value exceeds £300	1	0	0
When the title is of any other description and the value exceeds £200 and does not exceed £300	0	15	0
When the title is of any other description and the value exceeds £100 and does not exceed £200	0	10	0
When the title is of any other description and when the value does not exceed £100	0	5	0
Contribution to the Assurance Fund upon first bringing land under the Act,—			
In the pound sterling	0	0	0½
Other fees—			
For every application to bring land under the Act	0	5	0
For every certificate of title on transfer where the consideration does not exceed £100	0	10	0
For every other certificate of title	1	0	0
Registering memorandum of transfer, mortgage, incumbrance, or lease	0	10	0

Other fees—*continued.*	£	s.	d.
Registering transfer or discharge of mortgage or of incumbrance, or the transfer or surrender of a lease	0	5	0
Registering proprietor of any estate or interest derived by settlement or transmission	0	10	0
For every power of attorney deposited	0	10	0
For every registration abstract	1	0	0
For cancelling registration abstract	0	5	0
For every revocation order	0	10	0
Noting caveat	0	10	0
Cancelling or withdrawal of caveat, and for every notice relating to any caveat	0	5	0
For every search	0	2	0
For every general search	0	5	0
For every map or plan deposited	0	5	0
For every instrument declaratory of trusts, and for every will or other instrument deposited	0	10	0
For registering recovery by proceeding in law or equity or re-entry by lessee	0	10	0
For registering vesting of lease in mortgagee, consequent on refusal of Trustee in Bankruptcy to accept the same	0	10	0
For entering notice of marriage or death	0	10	0
For entering notice of writ or order of Supreme Court	0	10	0
Taking affidavit or statutory declaration	0	5	0
For the exhibition of any deposited instrument, or for exhibiting deeds surrendered by applicant proprietor	0	5	0
For certified copy, not exceeding five folios	0	5	0
For every folio or part folio after first five	0	0	6
For every notice to produce deeds or instruments	0	5	0
For every outstanding interest noted on certificate of title	0	5	0
When any instrument purports to deal with land included in more than one grant or certificate, for each registration memorial after the first	0	2	0

Regulations.

All fees under the Act shall be due and payable in advance.

Where several properties are included in one form of application, there shall be charged in respect of each property an application fee, and a fee for bringing the land under the Act. Land included within one outer boundary shall be deemed one property for the purpose of this regulation.

In all cases a fee of one pound (£1) is hereby prescribed as the charge to be made for advertising notice of application; provided that, whenever it is necessary that unusual publicity shall be given to any application, the District Land Registrar may require payment of such additional sum as shall, in his judgment, be sufficient to defray the cost of such advertisements.

In all cases where application is made to bring land under the Act, and the certificate of title is directed to issue and is issued in the name of the applicant, the fees for bringing such land under the Act, with the exception of the "application fee," may, at the request of the applicant, remain unpaid until such land is dealt with by him as registered proprietor. The District Land Registrar shall retain any such certificate of title until the fees due upon the same have been paid, and, until such payment, shall not register any dealing with the land included in such certificate of title.

Printed forms supplied by the Registrar for use under the Act shall be charged for at the rate of one shilling each. Solicitors, land-brokers, and others having forms printed for their own use, and at their own expense, shall, on approval of such forms by the Registrar, be entitled to have the same sealed free of charge.

DUTIES ON ESTATES OF DECEASED PERSONS.

By the Amendment Act of 1885 the Schedule of Duties payable under the principal Act of 1881 has been repealed, and the following imposed in lieu thereof:—

1. When the value does not exceed £100	No duty.
2. Upon any amount exceeding £100 but not exceeding £1,000—	
On the first £100	No duty.
And on the remainder	£2½ per cent.
3. Upon any amount exceeding £1,000 but not exceeding £5,000	£3½ per cent.
4. Upon any amount exceeding £5,000, but not exceeding £20,000	£7 per cent.
Upon £20,000 and any amount over that sum	£10 per cent.
Strangers in blood, excepting adopted children	£3 per cent. additional.

These duties are leviable upon the final balance of the real and personal estates.

The exemption in respect of property passing absolutely to widow at death of husband is now extended *vice versâ*.

There are also special provisions in the law affecting children and half children inheriting property, as to deeds of gift, &c.

PART II.—STATISTICAL.

SECTION I.—IMPORTS; CUSTOMS AND EXCISE REVENUE.

Imports.

The quantities and values of imports used in making up the figures given in this portion of the statistical information are obtained from Customs entries, verified where necessary, as with goods subject to an *ad valorem* duty, by examination. For exports, the "free on board in New Zealand" value is given; but, as regards the main items, the Collector of Customs examines carefully the amounts stated, and compares them with current price-lists, to prevent any over-estimate. Goods transhipped at a foreign port are regarded as imported from the country where they were originally shipped, and exports as destined for the country where it is intended to land them. The countries named, however, may not be those of origin or destination, as no attempt is made to trace the goods beyond the ports disclosed by the documents presented to the Customs. Very little cargo *in transitu* passes through New Zealand.

The total declared values of the imports in 1900 amounted to £10,646,096, being an increase on the corresponding total in 1899 of £1,906,463. These figures, however, include specie. The value of coin brought into the colony in 1900 was £438,770, against £125,977 in the previous year, and if these amounts are excluded, the increase on the values of all other articles will be found to reach the sum of £1,593,670.

The value of imports for each of the past thirteen years was:—

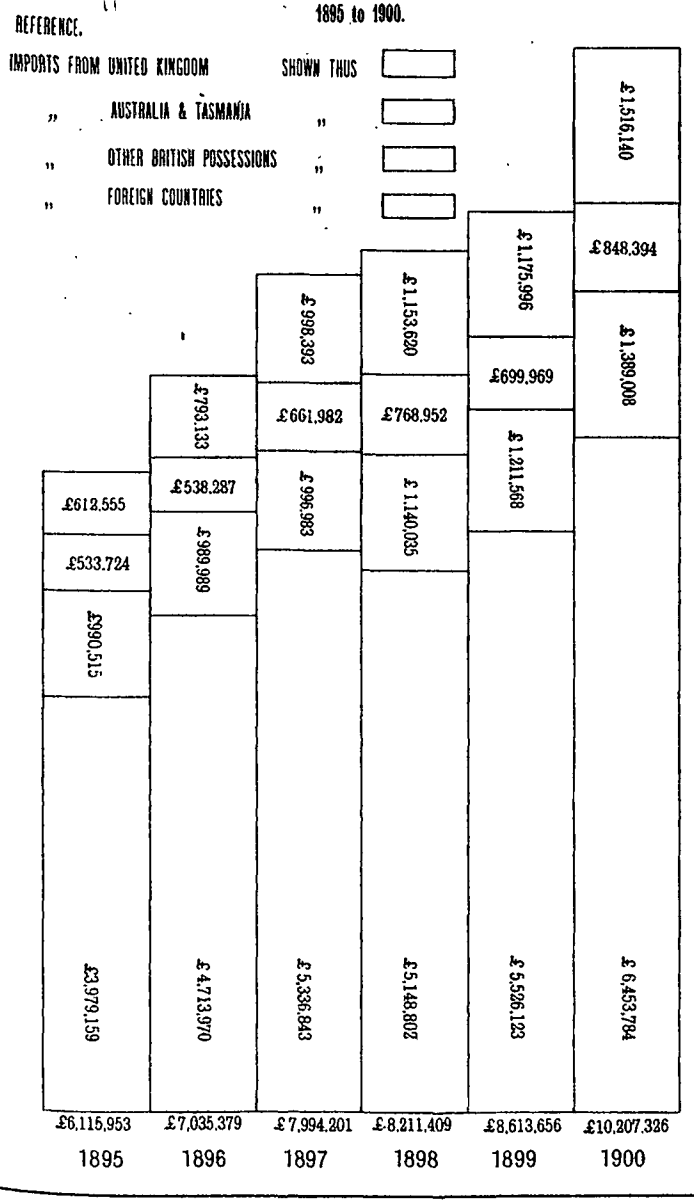
Year.	Imports, inclusive of Specie. £	Imports, exclusive of Specie. £
1888	5,941,900	5,430,050
1889	6,308,863	5,980,583
1890	6,260,505	5,928,625
1891	6,503,849	6,431,101
1892	6,943,056	6,742,544
1893	6,911,515	6,494,279
1894	6,788,020	5,990,177
1895	6,400,129	6,115,953
1896	7,137,320	7,035,379
1897	8,055,223	7,994,201
1898	8,230,600	8,211,409
1899	8,739,633	8,613,656
1900	10,646,096	10,207,326

IMPORTS.

RISE IN VALUE OF IMPORTS TO NEW ZEALAND

(EXCLUSIVE OF SPECIE).

1895 to 1900.



The expansion movement observed as proceeding since 1894 to 1899 is found to have been continued during the year 1900; and at a far higher rate than during any of the previous years of the period.

It will be seen that the value of imports, exclusive of specie, rose from £5,430,050 in 1888 to £6,742,544 in 1892, then fell to £5,990,177 in 1894, after which there ensued a steady advance year by year to £10,207,326 in 1900. The movement for the period 1894–1900 is a rise at the rate of 70 per cent. in money value, or a sum of £4,217,149; for the ten years 1891–1900 the increase is £3,776,225, or 59 per cent. In quantities of various imports the increases vary, and full particulars of every kind of article imported in 1900 are to be found in detail further on, which may be critically examined with those in similar tables for 1899 and 1898, given in the previous Year-books.

It is desirable to consider not only the total value of the import trade for different years by comparing these figures, but to ascertain the rates *per capita* of population, to judge whether the imports are relatively greater or less than they have been. The fairest comparisons are from calculations made after deducting specie imported, for in the year 1894, as an instance, no less than £797,843 was brought to the colony in coin.

The figures for each year from 1888 stand thus:—

Years.	Imports per head of mean Population, excluding Maoris.	
	Including Specie.	Excluding Specie.
	£ s. d.	£ s. d.
1888	9 16 4	8 19 5
1889	10 5 6	9 15 6
1890	10 0 2	9 11 0
1891	10 6 6	10 4 3
1892	10 16 3	10 9 11
1893	10 9 0	9 16 5
1894	9 19 11	8 16 5
1895	9 4 10	8 16 8
1896	10 1 11	9 19 1
1897	11 3 3	11 1 7
1898	11 3 7	11 3 1
1899	11 13 1	11 9 8
1900	13 18 10	13 7 4

Using the figures exclusive of the specie, it will be seen that, though comparisons for years since 1888 do not show by any means a steady rise since that year, the position is that whereas the imports proper were only £8 19s. 5d. per head of population in the first period of the table, they had increased by £4 7s. 11d. per head in 1900, and increase is observed in each year's figures since 1894, amounting to £4 10s. 11d. for the last seven years.

By means of the accompanying table, in which the articles

imported are arranged in groups according to their nature, the increases in value can be traced to their specific heads :—

IMPORTS FOR FIVE YEARS.

Group of Principal Articles imported.	1896.	1897.	1898.	1899.	1900.
	£	£	£	£	£
Apparel and slops ..	370,516	362,389	354,940	393,689	451,879
Boots and shoes ..	127,985	132,203	130,912	151,593	194,811
Cotton piece-goods ..	434,673	414,673	417,733	447,495	514,607
Drapery	336,839	344,539	343,820	395,696	438,299
Haberdashery ..	68,473	70,853	85,985	84,808	95,401
Hats and caps ..	58,310	63,310	66,416	68,184	66,799
Hosiery	82,984	83,796	75,736	90,545	103,291
Linen manufactures ..	57,325	57,039	56,572	69,167	83,206
Millinery	28,866	32,245	36,074	36,932	43,313
Silks	69,742	74,400	79,910	87,639	97,922
Woollens	254,580	293,449	286,911	297,387	330,713
Totals.. ..	1,890,293	1,928,896	1,935,009	2,123,135	2,420,241
Agricultural implements	6,894	11,095	17,234	17,063	13,508
Cutlery	17,384	19,636	22,722	19,764	23,089
Hardware and ironmongery	182,313	228,465	248,665	255,701	330,314
Rails and railway bolts, &c.	29,592	90,489	42,773	63,557	138,464
Iron and steel, other, pig, wrought, wire, &c.	502,725	529,204	554,124	632,182	865,361
Machinery	251,905	368,416	422,011	405,551	536,429
Nails	32,304	33,279	36,792	31,363	48,050
Railway plant ..	3,062	46,082	57,224	63,807	63,128
Sewing-machines ..	24,641	21,542	30,618	30,801	37,429
Tools, artificers' ..	44,386	57,903	70,631	59,066	77,447
Totals ..	1,095,206	1,406,111	1,502,794	1,578,855	2,133,219
Sugar	422,134	373,407	425,270	354,925	451,522
Tea	166,860	178,350	183,717	183,691	199,934
Totals.. ..	588,994	551,757	608,987	538,616	651,456
Beer	35,123	39,614	37,844	39,166	34,296
Spirits*	160,648	178,844	187,020	215,685	198,282
Tobacco	149,905	164,889	161,836	184,173	198,861
Wine	40,879	50,202	48,514	51,640	55,098
Totals.. ..	386,555	433,049	435,214	490,664	486,537

* Includes methylated and perfumed spirits, and spirits of wine.

IMPORTS FOR FIVE YEARS—*continued.*

Group of Principal Articles imported.	1896.	1897.	1898.	1899.	1900.
	£	£	£	£	£
Paper	117,577	127,980	133,901	135,482	174,111
Printed books ..	111,344	116,485	109,961	132,260	136,891
Stationery	86,628	92,871	98,469	100,875	96,408
Totals.. ..	315,549	337,336	342,331	368,617	407,410
Bags and sacks ..	55,961	104,401	111,116	123,596	141,810
Coals	94,138	98,139	105,223	92,815	120,406
Fancy goods	89,072	100,824	103,786	110,114	128,339
Fruits (including fresh, preserved, bottled, dried)	145,016	183,133	181,447	180,590	226,128
Oils	128,138	163,793	162,523	126,967	206,770
Other imports (excluding specie)	2,246,457	2,686,762	2,722,979	2,879,687	3,285,010
Total Imports (excluding specie)	7,035,379	7,994,201	8,211,409	8,613,656	10,207,326
Specie imported ..	101,941	61,022	19,191	125,977	438,770
Total Imports ..	7,137,320	8,055,223	8,230,600	8,739,633	10,646,096

Of £10,207,326 the total value of goods imported during 1900, the chief items were as under:—

Articles.	Value. £	Proportion per Cent
Clothing, drapery, &c.	2,420,241	23·71
Metal, machinery, and implements..	2,133,219	20·90
Tea and sugar	651,456	6·38
Wine, beer, spirits, and tobacco ..	486,537	4·77
Paper, books, and stationery ..	407,410	3 99
Other imports	4,108,463	40·25
	10,207,326	100·00

The declared value of the clothing, drapery, &c., imported increased from £2,123,135 in 1899 to £2,420,241 in 1900. In 1896 the value of the import was £1,890,293. The iron, machinery, and implements imported in 1900 were valued at £2,133,219, an increase of £1,038,013 on the corresponding figures for 1896 (£1,095,206). The value of sugar and tea imported in 1900 shows an increase, when compared with 1899, of £112,840. Beer, wine, spirits, and tobacco, on the other hand, show a decrease of £4,127, from £490,664 in 1899 to £486,537 in 1900.

To the total value of "Other imports (excluding specie)," in 1900 (£3,285,010), shown in the table above, arms, ammunition, and explosives contributed a sum of £111,859; bicycles, tricycles, and fittings, £118,645; drugs, chemicals, and druggists' wares, £187,821; patent medicines, £48,345; manures, £112,287; musical instruments, £97,678; glass and glassware, £111,847; earthenware,

£51,013; floorcloth and oilcloth, £64,212; furniture and upholstery, £64,408; cement, £38,748; leather and leather manufactures, £89,726; seeds, £53,780; and timber, £104,927.

Goods imported by means of the "Parcels Post" system during 1900 were valued at £87,662.

Value of Free and Dutiable Imports.

The values of the imports into New Zealand during the years 1899 and 1900 are given in the next table, classified according to the duties to which they were liable, and arranged so as to show the declared value of goods on which specific or *ad valorem* duties at various rates are payable, and of those admitted free of duty:—

Duties to which Imports liable.	Value of Imports, 1899.		Value of Imports, 1900.	
	£	£	£	£
Specific duties		2,134,978		2,397,728
Ad valorem duties—				
5 per cent.	234,022		339,750	
10 per cent.	147,998		169,191	
15 per cent.	34,461		42,852	
20 per cent.	2,013,422		2,282,246	
22½ per cent.	153,106		196,325	
25 per cent.	844,925		834,926	
40 per cent.	35,187		1,488	
Various	2,464		127,232*	
Parcels-post (various) ..	70,094		87,662	
		3,535,679		4,081,672
Duty-free (excluding specie)	..	2,942,999	..	3,727,926
Specie imported	..	125,977	..	438,770
Totals	..	£8,739,633	..	£10,646,096

The proportions of free and dutiable goods imported during 1897, 1898, 1899, and 1900 are compared with similar figures for 1894, the year preceding that in which the altered tariff came into force:—

—	1894.	1897.	1898.	1899.	1900.
Merchandise—	£	£	£	£	£
Free	1,871,772	2,675,931	2,800,046	2,942,999	3,727,926
Dutiable	4,118,405	5,318,270	5,411,363	5,670,657	6,479,400
Imports (less specie) ..	5,990,177	7,994,201	8,211,409	8,613,656	10,207,326
	£	£	£	£	£
Total net duty received	1,572,467	1,915,693	1,965,404	2,046,452	2,174,498
Duty, per cent. of imports—	Per Cent.	Per Cent.	Per Cent.	Per Cent.	Per cent.
(*a*.) On dutiable imports	38·18	36·02	36·32	36·09	33·56
(*b*.) On all merchandise ..	26·25	23·95	23·94	23·76	21·30

* The amount for 1900, under the heading "Various," includes the value of imports liable to an *ad valorem* duty, but on which a lower duty was levied under the altered tariff of 1900 for part of the year.

Sugar.

The value of sugar (including glucose, molasses, and treacle) imported in 1900 was £451,522, an increase of £96,597 on the amount for 1899 (£354,925). The value of this import for the last three years has averaged only £410,572 per annum; but for the three years, 1882, 1883, and 1884, the average, with a much smaller population, was £615,207 for each year. The smaller average amount for the last three years is due, not so much to a reduction in the quantity imported as to the fall in the price of sugar, and partly to the fact that the proportion of refined to raw sugar has vastly decreased.

The following figures, giving the consumption per head of sugar in the Australasian Colonies, are, saving those for New Zealand—and excluding a proportion (30 lb. per head) deducted on account of Maoris—taken from Mr. Coghlan's "Seven Colonies of Australasia, 1899-1900." The figures stating the consumption of tea, given further on, are taken from the same source:—

Annual Consumption of Sugar per Head in the Australasian Colonies.

	Lb.		Lb.
Queensland	129·9	Victoria	92·3
Western Australia	114·3	New Zealand	88·9
New South Wales	103·0	Tasmania	84·9
South Australia	98·8		

Tea.

The quantity of tea entered for consumption in 1900 was 5,174,707 lb. Supposing Maoris to use, on an average, 1 lb. per head per annum, the consumption of tea per head of the population, exclusive of Maoris, would be 6·6 lb. in 1900.

Annual Consumption of Tea per Head in the Australasian Colonies.

	Lb.		Lb.
Western Australia	10 0	Victoria	7·2
New South Wales	7·8	New Zealand	6 3
South Australia	7·7	Tasmania	6·1
Queensland	7·7		

Beer, Spirits, and Wine.

During 1900 excise duty was paid on 6,811,280 gallons of beer; and 175,620 gallons of beer, 549,932 gallons of spirits, and 116,188 gallons of wine were entered at the Customs for home consumption.

The actual quantity of beer made and used in the colony has increased from 4,243,760 gallons in 1886 to 6,811,280 gallons in 1900:—

Beer manufactured in New Zealand on which Excise Duty was paid.

	Gal.		Gal.
1886	4,243,760	1894	4,807,360
1887	4,264,160	1895	4,936,400
1888	4,050,560	1896	5,382,960
1889	4,402,480	1897	5,741,200
1890	4,676,240	1898	6,013,120
1891	4,567,920	1899	6,261,200
1892	4,752,720	1900	6,811,280
1893	4,873,600		

The following table gives the consumption per head of alcoholic liquors by the people, excluding and including Maoris, showing separately the proportions of beer, wine, and spirits from 1883 to 1900. To the amount of beer manufactured in the colony in each year on which excise duty was paid has been added the amount brought into consumption from imports:—

Year.	Beer.		Spirits.		Wine.	
	Excluding Maoris.	Including Maoris.	Excluding Maoris.	Including Maoris.	Excluding Maoris.	Including Maoris.
	Gal.	Gal.	Gal.	Gal.	Gal.	Gal.
1883	9·435	8·709	1·088	1·005	0·315	0·291
1886	7·861	7·333	0·820	0·765	0·212	0·198
1889	7·624	7·136	0·598	0·560	0·176	0·165
1892	7·807	7·328	0·708	0·664	0·174	0·163
1895	7·421	6·996	0·629	0·593	0·135	0·127
1898	8·427	7·995	0·668	0·634	0·146	0·139
1899	8·583	8·150	0·687	0·653	0·148	0·141
1900	9·150	8·696	0·720	0·684	0·152	0·145

A comparison of the annual consumption of beer, spirits, and wine per head in the Australasian Colonies is added:—*

—	Beer.	Spirits.	Wine.	—	Beer.	Spirits.	Wine.
	Gal.	Gal.	Gal.		Gal.	Gal.	Gal.
Queensland ..	12·36	0·91	0·60	Western Australia	21·50	2·21	1·38
New South Wales	9·14	0·73	0·61	Tasmania ..	7·19	0·38	0·09
Victoria ..	11·43	0·73	1·35	New Zealand (including Maoris)	7·99	0·63	0·13
South Australia ..	9·13	0·40	1·98				

* See "The Seven Colonies of Australasia, 1897-98.

Tobacco.

The tobacco entered for consumption in 1900 was 1,853,957 lb., and the consumption per head of population, including Maoris, 2·31 lb.

Average Annual Consumption per Head of Tobacco in various Countries.

	Lb.		Lb.
Holland	6·92	New Zealand	2·31
Western Australia	5·08	Canada	2·11
United States	4·40	Victoria	2·06
Turkey	4·37	France	2·05
Austria-Hungary	3·77	Sweden	1·87
Denmark	3·70	South Australia	1·83
Switzerland	3·24	Tasmania	1·80
Belgium	3·15	Spain	1·70
Germany	3·00	United Kingdom	1·41
Queensland	2·86	Italy	1·34
New South Wales	2·53	Russia	1·23

Imports from Different Countries.

The imports from the United Kingdom to New Zealand in 190 were valued at £6,504,484, or an increase of £977,839 on the value of goods imported from the Home country during the previous year. From British colonies and possessions the imports were £2,625,372, an increase of £585,575 on the amount in 1899.

The following are the values of imports from different countries or places in 1900 and 1899, given in the order of the increase or decrease from each:—

Country, Colony, State, &c.	1900. £	1899. £	Increase. £
United Kingdom	6,504,484	5,526,645	977,839
New South Wales	1,052,792	748,201	304,591
United States (East Coast)	958,286	687,906	270,380
Victoria	552,013	407,078	144,935
Fiji	364,510	250,706	113,804
Bengal	255,911	212,654	43,257
Germany	182,074	160,605	21,469
United States (West Coast)	103,587	87,403	16,184
Asia Minor	20,725	11,354	9,371
Tasmania	41,196	31,991	9,205
Pacific Islands	61,025	52,249	8,776
France	26,326	19,481	6,845
Ceylon	123,333	116,833	6,500
Singapore	26,292	19,884	6,408
Philippine Islands	12,474	6,632	5,842
Belgium	49,295	44,561	4,734
Sweden	10,101	6,199	3,902
Japan	43,404	40,543	2,861
Hongkong	20,953	18,363	2,590
Greece	15,653	13,075	2,578
Western Australia	2,811	663	2,148
British Columbia	8,996	8,229	767
Turkey	534	37	497
Egypt	840	518	322
Cape Colony	487	206	281
Bombay	345	77	268
Madras	523	310	213
Mauritius	165	..	165
Macao	160	..	160
Spain	1,129	979	150
Austria	1,062	946	116
Ellice Island	75	..	75
Italy	6,975	6,935	40
Natal	15	4	11

Country, Colony, State, &c.	1900. £	1899. £	Decrease. £
Canada	32,169	55,021	22,852
Queensland	99,050	118,730	19,680
Holland	17,130	21,643	4,513
Switzerland	1,179	4,454	3,275
China	1,495	4,516	3,021
Portugal	773	2,238	1,465
Malden Island	12,665	13,973	1,308
Burmah	1,773	2,959	1,186
South Australia	29,116	30,165	1,049
West Indies	1,405	2,344	939

	1900. £	1899. £	Decrease. £
Denmark	247	919	672
Norfolk Island	140	569	429
Norway	285	475	190
West Indies (British)	19	141	122
Canary Islands	76	131	55
Mexico	..	41	41
Malta	23	40	17
South African Republic	..	5	5
Argentine Republic	..	2	2

The following table gives the value of the imports for each port in New Zealand for the last two years, arranged in order of magnitude for 1900:—

	1900. £	1899. £
Wellington	2,767,066	2,067,111
Auckland	2,617,329	2,211,719
Dunedin	2,158,177	1,845,969
Lyttelton	1,770,709	1,449,473
Invercargill and Bluff ..	285,170	258,713
Napier	209,418	212,875
Wanganui	145,267	114,471
Timaru	143,090	119,766
Nelson	140,514	123,103
New Plymouth	67,338	59,515
Greymouth	59,460	43,242
Poverty Bay	49,278	37,996
Oamaru	47,559	44,885
Westport	37,750	32,222
Wairau	15,942	12,813
Patea	15,561	14,483
Hokitika	12,693	11,687
Kaipara	7,883	5,561
Tauranga	3,639	3,308
Picton	1,591	627

Imports, by Provincial Districts.

The values of imports in each provincial district during 1890 and 1900 were as under:—

	1890. £	1900. £
Auckland	1,406,477	2,678,129
Taranaki	24,575	82,899
Hawke's Bay	162,097	209,418
Wellington	1,282,821	2,912,333
Marlborough	19,547	17,533
Nelson	151,422	178,264
Westland	93,426	72,153
Canterbury	1,269,572	1,913,799
Otago	1,836,754	2,493,906

The value of imports by parcel-post (£13,834 in 1890 and £87,662 in 1900) must be added to the above figures in order to make up the totals (including specie) of £6,260,525 and £10,646,096 for the respective years.

Imports, North and Middle Islands.

Separating the value of the imports for the North Island from that of the Middle Island, it is found that whereas in 1890 the

former received imported goods to the value of £2,875,970, against £3,370,721 for the Middle Island, in the year 1900 the North Island imports exceeded those of the other, the values being respectively £5,882,779 and £4,675,655, or an excess for the North Island of £1,207,124, or 25·82 per cent.

Details of all Articles of Import.

Details of all imports for 1900, giving quantities and values of articles introduced into the colony, with the amounts entered for Home consumption, and the amount of duty received, are next shown:—

General Imports into the Colony of New Zealand during the Year 1900.
(For rates of Duty, see Tariff, pp. 82 to 97.)

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Acid—				
Acetic	342,213 lb.	3,751	375,248 lb.	2,345 6 0
Carbolic	76,853 „	1,014	..	..
Salicylic	2,800 „	284	..	..
Sulphuric	194,717 „	1,715	..	..
Tartaric	93,883 „	5,102	97,864 lb.	407 15 4
Unenumerated ..	104,896 „	1,933	..	..
Alkali—				
Potash and caustic potash	1,958 cwt.	2,396	..	..
Soda ash	13,805 „	4,491	..	..
Soda, carbonate and bicarbonate	10,605 „	3,685	11,029 cwt.	551 9 7
Soda, caustic	12,507 „	8,388	..	..
Soda crystals	139 „	34	139 „	13 19 1
Soda silicate	4,387 „	1,378	..	..
Unenumerated ..	6,162 „	3,149	..	..
Alum	1,166 „	486	..	..
Animals, Living—				
Birds	700 No.	284	..	..
Cattle	11 „	862	11 No.	5 10 0
Dogs	41 „	385	..	..
Deer	11 „	562	..	..
Horses	356 „	24,538	348 No.	348 0 0
Pigeons	8 „	20	..	..
Pigs	6 „	135	..	..
Poultry	261 „	482	..	..
Sheep	238 „	2,175	..	..
Turtles	4 „	4	..	..
Apparel and slops n.o.e. ..	..	449,323	£450,848	112,712 3 7
„ ..	..	1,068	..	..
Apparel made to the order of residents in the colony	..	1,488	£1,550	620 7 0
Arms, ammunition, and explosives—				
Accoutrements ..	..	580	..	..
Caps, percussion ..	3,418,729 No.	666	..	..
Cartridges, 10- to 24-bore	4,253,281 „	13,404	4,241,700 No.	3,181 5 9
Cartridges n.o.e. ..	7,993,783 „	4,583	£4,579	915 18 8
„	1,453,178 „	9,485	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1900—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ d. s.
Arms, ammunition, and explosives—*continued.*				
Cartridge-cases ..	440,000 No.	855	435,500 No.	163 6 1
Detonators for dynamite	1,139,275 „	1,732	..	..
Dynamite	101,200 lb.	6,238	..	..
Firearms	8,234 No.	11,259	£10,752	2,150 8 8
Fuse	174,289 coils	4,841	..	..
Lithofracteur and cordite	297,680 lb.	18,767	..	..
Ordnance stores ..	..	20,946	..	..
Powder, blasting ..	557,594 lb.	12,260	..	..
Powder, sporting ..	27,133 „	2,661	23,706 lb.	592 13 3
Shot	168 cwt.	225	161 cwt.	80 13 10
Swords	216 No.	330	..	..
Other explosives ..	39,200 lb.	3,027	..	..
Asphalt..	537 cwt.	169	..	..
Bacon and hams ..	5,045 lb.	162	2,040 lb.	17 0 0
Bags and sacks—				
Cornsacks	541,864 doz.	137,737	..	..
Unenumerated ..	24,686 „	4,073	£160	32 0 6
Bagging and sacking ..	..	424	£27	4 1 0
Basketware and wickerware	..	2,668	£2,646	529 4 0
Beer	171,769 galls.	34,296	175,619 galls.	17,561 19 0
Belting, leather	36,817 lb.	4,253	36,836 lb.	613 18 10
Belting, other than leather	..	17,331	..	..
Beverages, non-alcoholic—				
Aerated and mineral waters	4,633 doz.	1,052	£1,101	220 3 1
Coffee essence ..	..	6,760	£6,919	1,383 16 0
Limejuice, sweetened ..	4,073 galls.	895	£826	206 9 9
„ unsweetened	50,758 „	4,067	..	..
Unenumerated ..	..	469	£469	117 5 0
Bicycles and tricycles ..	6,830 No.	50,417	£48,876	9,775 4 0
Materials for ..	..	68,228	£33,809	6,761 17 4
Biscuits—				
Fancy, and other kinds..	35,500 lb.	1,650	35,520 lb.	296 0 1
Ships', plain	50 cwt.	53	51 cwt.	7 14 11
Blacking	..	3,488	£3,550	710 0 1
Blacklead	..	2,744	£2,904	580 16 5
Blue	180,760 lb.	4,913	198,283 lb.	1,653 7 2
Boats	16 No.	650	..	..
Bones	368 tons	1,729	..	..
Books, printed	..	136,891	..	..
Boots and shoes	87,950 doz. pr.	187,629	£185,617	41,763 19 6
Gum-boots	829 „	7,182	..	..
Borax	1,921 cwt.	2,251	..	..
Brass—				
Pigs, bars, tubes, or sheets	477 „	2,241	..	..
Forging or stamped work in the rough ..	41 „	191	..	..
Manufactures	..	7,972	£8,018	1,603 11 6
Bricks—				
Building	17,500 No.	192	..	..
Fire	329,620 „	1,338	£1,338	267 14 0
Other kinds	17,070 „	68	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1900—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Brushware and brooms ..	3,525 doz.	2,035	£1,970	492 8 0
Brushes (clothes, hair, hat, and toilet) ..	..	5,276	£5,311	1,062 6 3
Unenumerated ..	..	6,640	£6,432	1,608 3 5
Materials for	..	7,630	..	..
Buckets and tubs—				
Iron	1,646 doz.	1,047	£1,041	260 7 5
Wood	152 „	64	£63	12 14 0
Building materials, unenumerated	..	5,402	..	..
Butter	2 cwt.	10	..	..
Candles	1,609,121 lb.	30,658	1,011,081 lb.	8,425 13 6
„	..	..	607,152 „	2,529 16 0
Canes and rattans ..	..	2,143	..	..
Canvas	..	35,404	..	..
Caramel, brewers' ..	13,870 lb.	221	12,085 lb.	151 1 3
Cards, playing	38,621 packs	920	49,115 packs	1,227 17 6
Carpeting and druggeting ..	..	40,778	£40,156	8,031 6 8
Carriages, &c.—				
Carriages	124 No.	2,617	£2,616	523 5 1
Carts, drays, and wagons	113 „	862	£861	172 4 4
Perambulators and go-carts	65 „	114	£114	22 16 0
Materials for	..	5,656	£5,515	1,103 0 8
Materials for axle-arms and boxes	..	15,705	..	..
Carriage and cart shafts, spokes, and felloes in the rough	..	6,396	..	..
Cart- and cart-makers' materials	..	12,728	..	..
Casks, empty	1,046 No.	865	£810	162 2 0
Cement	81,234 barrels	38,748	76,727 barrels	7,672 14 0
Chains and chain cables ..	7,341 cwt.	9,122	..	..
Charcoal	55 „	22	..	..
Cheese	40 „	183	£114	22 18 8
Chicory	54 lb.	3	162 lb.	2 0 6
China, porcelain, and parian-ware	..	17,628	£17,314	3,462 17 10
Clocks	37,515 No.	10,973	£10,894	2,178 17 6
Coal	124,033 tons	120,406	..	..
Cocoa and chocolate ..	378,918 lb.	39,595	329,676 lb.	4,120 19 2
Cocoa beans	172,132 „	6,511	..	..
Coffee—				
Raw .. .	262,828 „	9,907	135,165 lb.	1,126 7 7
Roasted	4,129 „	184	2,076 „	36 7 6
Coke	963 tons	2,451	..	..
Combs . ..	..	1,391	£1,369	273 18 2
Confectionery—				
Chocolate in plain trade packages	125,068 lb.	6,001	117,969 lb.	1,474 12 3
Chocolate, fancy packages	..	5,904	£6,019	1,203 16 0
Unenumerated ..	489,377 „	15,338	482,367 lb.	4,019 14 7

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1900—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Copper—				
Nails	342 cwt.	1,535	..	..
Pig, bar, sheet, and tube	4,298 „	20,099	..	..
Rod and bolt	274 „	1,078	..	..
Sheathing	1,604 „	5,553	..	..
Copper manufactures	..	1,056	£1,035	207 0 0
Copra	567 tons	5,562	..	..
Cordage	3,792 cwt.	11,011	£10,394	2,078 15 0
Hawsers of 12 in. and over	113 „	375	..	..
Iron and steel	13,600 „	27,970	..	..
Cork, cut	..	9,194	£8,991	1,798 2 11
Cotton piece-goods—				
Butter- and cheese-cloth	..	3,747	..	..
Calico, white and grey	..	147,131	..	..
Corduroy, moleskin, and beaver-skin	..	5,339	..	..
Leather-cloth	..	5,756	..	..
Shirtings, coloured cotton	..	42,036	..	..
„ flannelette	..	6,356	..	..
„ union, of 6d. per yard and under	..	4,066	..	..
Tubular woven cotton cloth	..	12,949	..	..
Waterproof material	..	34,169	..	..
Unenumerated	..	253,058	£246,635	36,998 17 6
Cotton—				
Raw	7,603 lb.	117	..	..
Waste	3,444 cwt.	4,689	..	..
Wick	108,100 lb.	4,448	..	..
Cutlery	..	23,089	£22,765	4,553 2 6
Doors, plain	257 No.	110	257 No.	25 14 0
Drapery	..	284,181	£285,533	57,106 13 2
Lace and laces	..	39,576	£40,530	10,132 13 0
Ribbons and crape	..	17,590	£17,685	4,421 4 9
Tailors' trimmings	..	106,952	..	..
Drugs—				
Baking powder and yeast preparations	..	301	£373	74 12 0
Chemicals n.o.e.	..	4,372	4,252	773 8 11
Cream of tartar	689,627 lb.	25,881	705,686 lb.	2,940 7 2
Drugs, druggists' sundries, and apothecaries' wares	..	67,841	£68,566	12,350 6 3
Tinctures and medicinal spirits	21,920 lb.	1,658	25,989 lb.	1,196 5 6
Anhydrous ammonia	..	3,297	..	..
Arsenic	1,067 cwt.	1,351	..	..
Disinfectants	..	4,902	..	..
Food preservative	..	2,118	..	..
Gums	..	2,172	..	..
Insecticides and tree-washes	..	1,084	..	..
Maltine	..	837	..	..
Medicinal barks, leaves, &c.	..	1,205	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1900—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
Drugs—*continued*—		£		£ s. d.
Phosphorus	..	1,586	..	..
Potassium cyanide	5,109 cwt.	30,703	..	..
Sheep-dip	..	25,054	..	..
Sheep- and horse-drenches and sheep licks	..	83	..	..
Unenumerated	..	13,376	..	..
Dyes	..	18,576	..	..
Earthenware	..	51,013	£50,075	10,014 19 5
Engine-packing	2,141 cwt.	7,736	..	..
Essences, flavouring—				
Spirituous	1,537 gals.	3,844	1,542 gals.	1,233 5 0
Flavouring n.o.e.	..	143	£125	18 16 3
Essential oils—				
Eucalyptus	8,732 lb.	1,976	£1,960	392 0 0
Other kinds	43,572 „	6,037	..	..
Fancy goods	..	128,339	£125,677	25,135 8 11
Felt sheathing	..	4,981	..	..
Fire-engines	128 No.	115	..	..
Fire-hose and other appliances	..	2,273	..	..
Fireworks	..	2,324	£2,026	405 4 10
Fish—				
Anchovies, salted	22 cwt.	42	..	..
Dried, pickled, and salted	1,975 „	3,782	2,035 cwt.	1,017 10 10
Potted and preserved	1,167,460 lb.	28,799	1,224,317 lb.	10,202 12 11
Fishing tackle—				
Artificial flies	..	205	£205	51 5 0
Fish-hooks	..	385	..	..
Unenumerated	..	2,508	£2,503	500 12 6
Flock	111 cwt.	119	£119	11 18 0
Floorcloth and oilcloth	..	64,212	£63,968	12,793 11 8
Flour	173 centals	41	172 centals	8 11 11
Foods for animals—				
Chaff	10 tons	37	9 tons	9 3 6
Unenumerated	..	1,896	£1,923	384 13 0
Foods, farinaceous—				
Arrowroot	89,138 lb.	915	..	..
Macaroni and vermicelli	109,464 „	1,459	..	..
Maizena and corn-flour	943,178 „	10,400	950,644 lb.	990 5 1
Sago and tapioca	20,807 cwt.	16,205	..	..
Unenumerated	..	1,675	..	..
Fruits, bottled and preserved	42,490 doz.	12,554	£11,995	2,998 13 5
Fruits, dried—				
Currants	2,989,082 lb.	41,364	2,995,525 lb.	18,559 10 8
Raisins	2,115,215 „	37,987	2,166,725 „	12,648 10 8
Unenumerated	1,038,405 „	14,715	1,038,381 „	8,653 3 7
Fruits, fresh—				
Apples, pears, plums, &c.	1,438,876 „	17,262	1,492,028 „	4,074 16 7
Currants and raspberries,	1,542 „	22	1,542 „	3 4 3
Lemons	528,601 „	6,658	528,601 „	1,101 5 1
Other kinds	20,696,345 „	92,527	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1900—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
Fruits, &c.—		£		£ s. d.
Lemon- and orange-peel, in brine	503,931 "	2,848	..	..
Preserved in sulphurous aci	13,389 "	188	13,389 lb.	55 15 9
Pulp and partially-preserved fruit	117 "	3	117 "	0 14 7
Fungus	26 cwt.	38	..	..
Furniture and upholstery	..	45,518	£44,662	11,165 8 11
Kapok	4,213 cwt.	12,735	..	..
Unenumerated	..	6,155	..	..
Furniture-, knife-, and plate-powder and polish	..	5,094	£5,088	1,017 14 0
Furs	..	3,250	£4,010	801 19 10
Gelatine and isinglass	71,476 lb.	5,218	..	1,071 5 8
Glass—				
Bottles, empty	..	33,928	..	..
Mirrors and looking-glasses	..	6,091	£6,188	1,547 0 10
Plate, bevelled	..	5,128	£5,059	1,264 15 0
" other kinds	336,160 sup. ft.	10,959	£11,047	2,209 7 5
Window	2,454,916 "	21,219	2,325,270 sup. ft.	2,325 5 5
Glassware	..	34,522	£27,588	5,517 13 3
Glue and size	117,026 lb.	2,944	112,060 lb.	700 7 7
Gold-leaf	..	1,202	..	..
Grain and pulse—				
Barley	155 centals	90	155 centals	15 10 7
Beans and peas	293 "	282	278 "	10 6 7
Oats	930 centals	253	158 centals	5 18 6
Wheat	60 "	22	60 "	2 5 0
Unenumerated	2,717 "	2,004	2,789 "	104 9 8
Ground, unenumerated	4,912 "	4,136	4,779 "	238 19 6
Grease	3,088 cwt.	2,489	£2,272	458 6 5
Grindery—				
Heel- and toe-plates	..	1,574	£1,608	361 17 0
Unenumerated	..	21,199	..	..
Haberdashery	..	17,495	£17.493	3,498 11 6
Buttons, &c.	..	26,170	..	..
Sewing-cottons	..	56,757	..	..
Unenumerated	..	4,979	..	..
Hair	1,024 cwt.	4,603	..	..
Hardware	..	275,525	£270,878	54,175 11 5
Coffin furniture	..	1,506	£1,506	301 4 0
Hardware, &c.	..	3,159	..	..
Hats and caps	68,968 doz.	66,799	£67,868	16,967 1 9
Hatters' materials	..	9,630	..	..
Hemp	120 tons	5,238	..	..
Hides	2,169 No.	1,955	..	..
Hops	94,148 lb.	4,100	108,649 lb.	2,716 4 6
Hosiery	..	103,291	£104,858	20,971 10 2
Indiarubber and gutta-percha goods	..	9,616	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1900—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Ink—				
Printing	148,608 lb.	6,866	..	..
Writing	..	1,450	£1,224	244 16 0
Instruments, musical—				
Harmoniums and organs	659 No.	6,597	£6,648	1,329 13 2
Pianos	3,583 „	79,534	£79,253	15,850 11 3
Unenumerated	..	11,384	£11,026	2,205 5 7
For Volunteer bands	..	163	..	..
Materials for	..	1,396	£188	37 12 0
Instruments, other kinds—				
Optical	..	2,713	..	..
Scientific	..	2,979	..	..
Surgical and dental	..	24,508	..	..
Surveying	..	716	..	..
Unenumerated	..	275	..	..
Iron and steel—				
Angle	974 tons	10,194	..	..
Bar, bolt, and rod	16,188 „	185,806	..	..
Bolts and nuts	14,070 cwt.	17,056	£2,008	401 11 1
Castings for ships	27 tons	1,288	..	..
Galvanised manufactures	..	988	£988	246 19 3
Hoop	1,679 tons	19,864	..	..
Hoop, galvanised	2,865 cwt.	2,569	2,861 cwt.	214 11 11
Pig	9,221 tons	48,467	..	..
Pipes and fittings	8,142 „	105,495	£105,161	5,258 1 3
Rails	11,649 „	96,826	..	..
Railway bolts and fastenings	1,489 „	21,638	£789	157 16 0
Sheet and plate	8,461 „	83,348	..	..
Sheet, galvanised, corrugated	227,862 cwt.	212,771	224,435 cwt.	22,443 10 11
Sheet, galvanised, plain	43,088 „	41,710	42,775 „	3,208 3 5
Staples and standards	359 tons	4,741	£4,733	946 12 7
Tanks	3,092 No.	9,844	3,070 No.	1,359 5 0
Wire, fencing, barbed	2,352 tons	32,096	..	..
Wire, fencing, plain	4,830 „	59,315	..	..
Wire, telegraphic and telephonic	350 „	5,463	..	..
Wire-netting	..	24,104	..	..
Wire, unenumerated	584 „	9,079	..	..
Unenumerated	927 „	2,292	..	..
Jams, jellies, and preserves	487,511 lb.	7,664	462,530 lb.	3,854 8 4
Jellies, concentrated	62,534 „	2,398	62,875 „	1,047 18 4
Jewellery	..	23,113	£22,390	4,478 0 0
Lamps, lanterns, and lamp-wick	..	22,254	£22,066	4,413 4 1
Lard	..	..	£36	7 4 0
Lead—				
Pigs and bars	522 tons	9,184	..	..
Pipe	2,121 cwt.	2,331	1,061 cwt.	185 14 8
Sheet	14,756 „	15,124	13,515 „	1,013 12 7
Lead manufactures	..	139	£139	27 16 0

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1900—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Leather	619,851 lb.	79,896	563,202 lb.	3,935 10 4
„ chamois	..	611	£614	122 18 3
Leather manufactures—				
Boot and shoe vamps and uppers	..	8,100	£8,071	1,815 19 10
Unenumerated	..	1,119	£1,132	240 11 6
Lighthouses, materials for	..	8	..	..
Linens—				
Forfar, dowlas, and flax sheetings n.o.e.	..	14,781	£1,671	334 4 0
Forfar, dowlas, &c., cut up under supervision	..	..	£10,588	..
Linens n.o.e.	..	20,171	£20,271	4,054 3 0
Hessians and scrim	..	48,248	..	..
Unenumerated	..	6	..	..
Linseed	38 tons	560	38 tons	37 13 11
Liquorice	..	2,656	£2,637	527 10 10
Machinery and machines—				
Agricultural	..	60,473	£22,442	1,122 1 10
Ploughs and harrows	..	13,508	..	..
Dairying	..	2,624	£2,000	100 0 0
„ engines for	32 No.	1,449	£1,508	75 8 0
„ boilers for	142 „	3,328	£3,040	152 0 0
„	..	21,966	..	..
Dredging	..	74,465	£72,869	3,643 9 6
Electric	..	48,520	£24,365	2,436 10 9
Engines, steam	65 No.	10,633	£9,504	1,900 16 0
„ gas	226 „	18,599	..	..
„ boilers for	53 „	5,007	£4,307	861 10 0
Flour-milling	..	2,316	£2,313	115 13 0
Gas-making	..	17,253	£15,179	1,517 18 0
Mining	..	32,097	£29,456	1,472 16 6
„ engines for	88 No.	23,277	£20,689	1,034 9 0
„ boilers for	41 „	11,387	£10,045	502 5 0
„	..	40,717	..	..
Paper-milling	..	516	£393	19 13 0
Oil-refining	..	772	£772	38 12 0
Portable and traction engines	45 No.	17,478	£10,400	520 0 0
Printing	..	22,797	£22,148	1,107 8 6
Refrigerating	..	23,969	£23,162	1,158 2 0
Sewing and knitting	10,709 No.	37,429	..	..
Wood-working	..	11,282	£8,810	440 10 0
Woollen-milling	..	6,332	£6,036	301 16 6
Unenumerated	..	61,638	£54,672	9,884 1 6
Materials for and parts of	..	17,543	£3,191	462 17 6
Malt	8,245 bush.	2,220	2,028 bush.	202 17 0
Rice malt	27,368 lb.	216	27,368 lb.	114 0 8
Manures—				
Bone-dust	6,779 tons	35,773	..	..
Guano	9,935 „	30,902	..	..
Unenumerated	12,103 „	45,612	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1900—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
Marble—		£		£ s. d.
Dressed or polished, and manufactures ..	..	4,289	£4,258	1,064 12 6
Hewn, or rough-sawn ..	182 tons	1,397	..	..
Matches and vestas—				
Wax	42,711 gross	9,086	41,804 gross	4,462 3 4
Wooden	36,434 „	2,753	30,052 „	1,511 12 7
Mats and matting ..	..	8,125	£8,365	1,673 1 4
Meats, potted and preserved	42,901 lb.	1,821	£1,812	362 8 8
Medicines, patent and proprietary	..	47,869	£29,094	8,145 7 0
Sarsaparilla	..	476	£271	42 5 0
Metal, manufactures of—				
Not otherwise enumerated	..	13,523	£11,143	2,228 14 10
Japanned and lacquered metalware	..	1,300	£1,266	316 8 11
Weighbridges and weighing-machines ..	..	3,847	£3,534	706 16 0
Anchors	515 No.	433	..	..
Rivets and washers ..	11,178 cwt.	11,052	..	..
Tacks	1,806 „	2,532	..	..
Type-writers	520 No.	7,014	..	..
Unenumerated ..	..	66,004	..	..
Metal sheathing, other than copper	639 cwt.	2,343	..	..
Milk, preserved	681,949 lb.	12,799	£13,763	3,440 15 7
Millinery—				
Feathers, ornamental ..	..	2,562	£2,587	646 13 5
Other kinds	..	40,751	£40,827	10,206 17 6
Mustard	198,961 lb.	11,396	207,851 lb.	1,732 1 10
Nails—				
Iron	69,255 cwt.	47,799	68,721 cwt.	6,872 2 6
Unenumerated ..	73 „	251	88 „	13 3 4
Naphtha	10,320 galls.	1,649	10,507 galls	262 13 9
Nuts—				
Almonds, in shell ..	13,646 lb.	308	14,381 lb.	119 16 10
Almonds, shelled ..	41,593 „	2 431	40,559 „	506 19 10
Almonds, Barbary, &c...	108,298 „	4,656	..	..
Cocoa	201,240 No.	686	..	..
Unenumerated ..	46,043 lb.	783	46,451 lb.	387 1 10
Oakum	1,263 cwt.	1,606	..	..
Oars	2,944 No.	458	..	..
Oils—				
Castor, bulk	89,288 galls.	11,408	69,244 galls.	1,731 2 0
Castor, bottled ..	1,336 doz.	524	£506	75 19 1
Cod liver	7,415 galls.	1,645	..	..
Colza	18,916 „	2,979	12,125 galls.	303 2 6
Fish, penguin, and seal	44,036 „	4,375	..	..
Linseed	245,286 „	33,755	234,835 galls.	5,870 17 7
Mineral, kerosene ..	2,797,771 „	109,513	1,632,237 „	40,805 18 7
Mineral, other kinds ..	181,420 „	14,900	154,292 „	3,857 6 1
Neatsfoot	2,351 „	238	2,340 „	58 10 0

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1900—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Oils—*continued*				
Olive, bulk	9,749 galls.	1,713	9,781 galls.	244 10 7
Olive, bottled	3,098 doz. pts	1,460	£1,429	214 7 11
Whale	85 galls.	19	..	..
Unenumerated, bulk	168,017 „	15,911	149,970 galls.	3,749 4 11
Unenumerated, bottled	5,389 doz. pts	2,130	£2,272	340 17 2
Unenumerated	139,943 galls.	6,200	..	..
Oilmen's stores	..	5,730	£5,814	1,162 16 11
Onions	11,915 cwt.	4,954	11,813 cwt.	590 13 0
Opium	3,977 lb.	6,934	3,213 lb.	6,425 12 6
Paints and colours—				
Ground in oil	38,140 cwt.	52,861	37,069 cwt.	4,633 12 3
Mixed, ready for use	5,280 „	13,715	4,396 cwt.	1,099 0 2
Unenumerated	10,284 „	11,271	..	..
Paper—				
Bags, coarse	16 „	31	16 cwt.	5 17 2
Bags, other kinds	2,275 „	3,826	£3,957	989 5 8
Butter-paper	2,587 „	4,770	..	..
Paperhangings	985,496 pieces	25,419	£25,091	3,763 13 1
Printing	120,609 cwt.	115,648	..	..
Wrapping	3,841 „	4,575	3,717 cwt.	929 7 11
Writing	9,700 „	18,051	..	..
Unenumerated	1,628 „	1,791	..	..
Pearl barley	1 „	3	6 cwt.	0 6 0
Peas, split	1,185 „	601	1,213 „	121 7 5
Peel, candied and dried	16,954 lb.	331	17,036 lb.	212 19 0
Perfumery—				
Perfumed spirits	1,545 galls.	5,420	1,429 galls.	2,144 7 3
Toilet preparations	..	8,075	£7,272	1,818 3 0
Unenumerated	..	1,831	£1,911	477 15 4
Phormium	13 tons	250	..	..
Photographic goods	..	4,338	£3,975	788 5 6
Copper, glass, and zinc plates for photo-lithographic work	..	821	..	..
Cameras and lenses	..	5,732	..	..
Sensitised surfaces	..	12,187	..	..
Pickles	5,032 galls.	1,237	4,665 galls.	699 16 7
Pictures, paintings, &c.	..	5,721	£4,448	889 13 7
Picture-frames and mounts	..	1,416	£1,385	277 0 0
Pitch	1,536 cwt.	670	..	..
Plants, shrubs, trees, &c.	..	3,033	..	..
Plaster of Paris	3,023 cwt.	688	..	..
Plate and plated ware	..	36,812	£36,861	7,372 3 10
Portmanteaux and travelling bags	..	4,487	£4,427	1,106 12 0
Leather bags and leather-cloth bags	..	105	£105	21 0 0
Potatoes	55 tons	137	..	..
Printing materials—				
Stereotypes and matrices	..	193	£106	26 9 10
Type and materials, n.o.e.	..	13,183	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1900— *continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Provisions n.o.e.	..	5,401	£5,224	1,044 16 1
Pumps	..	3,465	£2,837	567 9 10
Putty	4,220 cwt.	2,030	4,207 cwt.	420 15 4
Quicksilver	5,415 lb.	729	..	..
Rags	22 tons	108	..	..
Railway plant n.o.e. ..	..	60,828	£585	117 0 0
Locomotives	1	1,300	..	..
Resin	12,704 cwt.	3,891	..	..
Rice	63,146 cwt.	40,843	33,621 cwt.	8,859 9 8
Rugs, all kinds	..	10,460	£10,614	2,122 16 1
Saccharine	6,968 oz.	378	7,297 oz.	547 6 3
Saddlery and harness (including whips) ..	..	33,687	£29,369	5,873 18 6
Harness, collar-check ..	..	4,252	..	..
Harness-oil and composition	..	2,469	£2,427	485 10 3
Saddlers' ironmongery ..	..	22,191	..	..
Salt	14,514 tons	33,815	8,439 tons	4,219 17 2
Rock	900 "	1,800	..	..
Saltpetre	79 "	1,633	..	..
Sashes—				
Glazed	5½ pairs	13	3½ pairs	0 14 0
Plain	3 "	2	3 "	0 6 0
Sauces	11,365 gals.	8,130	11,883 gals.	2,376 12 2
Sausage-skins	198,021 lb.	11,292	188,301 lb.	2,353 15 3
Seeds—				
Grass and clover ..	13,773 cwt.	34,133	..	..
Unenumerated ..	..	19,647	..	..
Shale	205 tons	655	..	..
Shells	2 cwt.	66	..	..
Ship-chandlery	..	6,219	..	..
Silks, &c.	..	97,922	£93,304	24,576 1 0
For flour-dressing ..	..	113	..	..
Silver	1,691 oz.	223	..	..
Skins and pelts—				
Fur-skins	8,334 No.	220	..	..
Kangaroo and wallabi skins	14,040 "	414	..	..
Unenumerated ..	16,708 "	885	..	..
Slates, roofing	197,940 "	1,640	..	..
Soap—				
Common	2 cwt.	3	2 cwt.	0 10 10
Powder	..	4,409	£4,495	899 0 0
Unenumerated ..	747,883 lb.	18,896	£20,337	5,084 7 1
Specie—				
Copper	..	1,350	..	..
Gold	..	357,100	..	..
Silver	..	80,320	..	..
Specimens illustrative of natural science ..	..	229	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1900—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Spices—				
Ground	18,809 lb.	791	20,269 lb.	337 16 4
Unground	448,022 „	12,626	386,166 „	3,218 1 1
Spirits—				
Bitters, cordials, and liqueurs	3,097 galls.	2,977	2,924 galls.	2,339 14 7
Brandy	76,407 „	31,975	70,363 „	56,290 14 4
Geneva and gin, unsweetened	65,817 „	14,977	59,218 „	47,374 7 6
Methylated	369 „	53	369 „	18 9 6
Rum	16,317 „	3,302	17,063 „	13,650 15 1
Sweetened	5,512 „	1,542	6,539 „	5,231 3 2
Whisky	378,080 „	123,445	387,613 „	310,090 13 10
Unenumerated ..	2,957 „	2,308	2,634 „	2,107 15 3
Spirits of wine	33,773 „	2,283	2,034 „	1,627 2 2
Methylated, in bond ..	..	..	32,226 „	805 12 11
Sponges	1,006 lb.	251	£218	41 0 0
Starch	958,630 „	10,567	958,697 lb.	7,989 2 10
Stationery—				
Manufactured	..	37,032	£34,572	8,642 19 1
Unenumerated ..	..	34,969	£30,187	6,037 7 1
Apparatus for teaching	..	3,493	..	..
Bookbinders' materials ..	..	6,332	..	..
Materials for cardboard-boxes	..	9,469	..	..
Unenumerated ..	..	5,113	..	..
Stearine	272,657 lb.	5,258	273,042 lb.	1,354 11 2
Stone—				
Building	339 tons	865	..	..
Granite, dressed ..	..	1,438	£1,437	359 5 0
Grind-, mill-, oil-, and whet-stones	..	2,300	..	..
Sugar—				
Raw	655,198 cwt.	327,601	3,150 lb.	6 11 3
Refined	152,987 „	119,648	77,915,902 lb.	162,324 15 11
Glucose	3,888 „	2,034	470,687 „	1,961 3 11
Molasses and treacle ..	7,076 „	2,231	2,200,346 „	4,584 1 1
Molasses, mixed with bone-black	239 „	32	..	..
Sulphur	3,690 cwt.	1,491	..	..
Tallow	..	6	..	..
Tanning materials, crude—				
Bark	4,425 tons	36,052	..	..
Other kinds	..	6,985	..	..
Tar	..	1,241	..	..
Tarpaulins and tents ..	..	3,889	£2,013	402 12 0
Tea	5,291,146 lb.	199,934	5,174,707 lb.	68,960 12 3
Textile piece-goods other than silk, cotton, linen, or woollen	..	14,376	£14,147	2,829 8 3
Articles made up from, other than apparel ..	..	9,799	£9,700	2,425 0 8

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1900—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Timber—				
Laths and shingles ..	682,000 sup. ft.	480	682,000 sup. ft.	68 4 0
Logs	1,836 No.	5,385	..	..
Logs, hewn	3,461,106 sup. ft.	36,744	..	..
Palings	472,741 No.	2,860	472,741 No.	472 4 11
Posts	12,628 „	433	12,628 „	50 10 4
Rails	1,350 „	40	1,350 „	2 14 0
Sawn, undressed ..	7,245,208 sup. ft.	55,574	5,775,900 sup. ft.	5,775 17 11
Sawn, dressed	139,720 „	2,194	139,875 „	279 15 0
Unenumerated ..	..	1,217	..	..
Tin—				
Block	2,560 cwt.	17,600	..	..
Foil	28,434 lb.	1,600	..	..
Sheet	46,911 cwt.	43,528	..	..
Tinware	..	10,138	£10,069	2,517 4 2
Tinsmiths' furnishings and fittings	..	1,594	..	..
Tobacco—				
Unmanufactured ..	62,389 lb.	3,181	48,310 lb.	4,831 0 0
Manufactured	1,642,014 „	128,885	1,570,397 „	274,819 8 9
Cigars	92,602 „	29,060	84,359 „	29,525 12 6
Cigarettes	156,927 „	37,560	59,521,500 No.	52,081 6 5
			5,934 oz.	148 7 3
Snuff	1,853 „	175	1,718 lb.	601 9 6
Tobacco-pipes and cases ..	..	22,321	£22,309	5,577 6 9
Tools and implements—				
Axes and hatchets ..	..	9,844	..	..
Engineers' machine tools	..	21,863	..	..
Scythes	..	1,452	..	..
Sheep-shears	..	3,831	..	..
Spades, shovels, and forks	..	14,640	..	..
Unenumerated ..	..	77,447	..	..
Tramway plant	..	4,653	£4,654	930 16 0
Turpentine, driers, and terebine	93,367 gals.	14,223	..	..
Twine—				
Binder	108 cwt.	258	..	..
Nets and netting ..	..	979	£955	191 2 9
Unenumerated ..	362,969 lb.	12,795	£12,700	2,539 19 6
Umbrellas and parasols ..	..	17,746	£17,987	3,597 9 4
Materials for	..	3,328	..	..
Varnish and gold size ..	94,781 gals.	17,421	33,894 gals.	3,389 7 8
Vegetables, fresh, dried, and preserved	..	770	£724	144 18 11
Vinegar	52,247 gals.	5,403	55,126 gals.	1,378 2 11
Watches	38,999 No	20,671	£19,934	3,986 15 8
Watchmakers' materials ..	..	605	..	..
Wax—				
Paraffin	1,743,941 lb.	24,643	1,366,633 lb.	6,950 3 8
Beeswax	204 cwt.	1,297	..	..
Whalebone	1 „	8	..	..

GENERAL IMPORTS INTO THE COLONY OF NEW ZEALAND DURING 1900—*continued.*

Articles.	Total Quantities Imported.	Value of Total Imports.	Entered for Home Consumption on Importation and ex Warehouse.	Amount of Duty received.
		£		£ s. d.
Whiting and chalk ..	11,748 cwt.	1,359	11,719 cwt.	585 19 0
Wine—				
Australian	52,981 gals.	17,854	48,981 gals.	12,245 5 9
Sparkling	8,850 "	16,229	8,042 "	3,619 0 3
Other kinds	60,289 "	21,015	59,165 "	17,749 13 4
Woodenware	..	33,877	£26,606	4,674 8 0
Wool—				
Greasy	24,591 lb.	700	..	..
Washed	4,484 "	307	..	..
Woollen piece-goods ..	..	301,923	£305,598	61,119 14 8
Blankets	26,656 pairs	10,775	£10,763	2,152 14 0
Woolpacks	50,109 doz.	52,468	..	..
Wool-pockets	253 "	155	..	..
Yarns	..	7,555	£7,431	1,486 5 1
Coir, flax, and hemp ..	..	6,771	..	..
Zinc—				
Perforated sheet ..	565 cwt.	1,067	..	..
Plain sheet	6,236 "	8,659	..	..
Spelter	1,964 "	2,483	..	..
Zinc manufactures, n.o.e.	..	62	£62	15 7 1
Minor articles required for the making-up of apparel	..	6,342	..	..
Articles and materials suited only for and to be used solely in the fabrication of goods in the colony ..	..	19,301	..	..
Miscellaneous goods—				
Manufactured	..	10,491	..	..
Unmanufactured ..	..	3,589	..	..
Vanilla beans	23,539 lb.	7,194	..	..
Parcels Post	..	87,662	..	16,642 11 6
EXCISE DUTIES.				
Tobacco, manufactured ..	..	..	47,515 lb.	2,375 15 0
Cigars	..	..	1,541 "	115 11 6
Cigarettes	..	..	278 "	13 18 0
Pharmacopœia tinctures, essences, extracts, and medicinal spirits containing more than 50 per cent. of proof spirit	..	..	40,577 "	1,521 12 11
Pharmacopœia tinctures, &c., containing less than 50 per cent. of proof spirit	..	..	2,161 "	27 0 5
Culinary and flavouring essences	..	..	149 gals.	89 11 7

Customs Revenue.

The Customs and excise duties received during the last five years are shown in detail, also the rate of revenue per head of mean population, inclusive and exclusive of Maoris, for each year:—

—	1896.	1897.	1898.	1899.	1900.
Customs Duties.	£	£	£	£	£
Spirits	362,923	384,218	395,513	414,395	442,090
Wine	28,846	30,518	31,138	32,045	33,614
Ale, Beer, &c.	18,208	19,035	19,158	17,594	17,562
Cigars, Cigarettes, and Snuff	58,788	65,347	71,430	77,810	82,357
Tobacco	239,988	244,669	257,516	263,057	279,651
Tea	73,858	76,081	78,676	79,975	68,960
Coffee, Cocoa, &c.	5,495	5,722	5,463	6,968	5,285
Sugar and Molasses	141,933	148,748	154,355	162,787	168,876
Opium	5,409	5,625	5,501	6,139	6,426
Other Goods by Weight	172,733	187,498	187,758	192,987	178,554
„ ad valorem	562,961	634,043	637,506	682,722	775,649
Other Duties	86,841	102,025	105,987	91,155	94,687
Parcels Post	7,090	8,632	11,725	14,368	16,643
Totals, Customs Duties	1,765,073	1,912,161	1,961,726	2,042,002	2,170,354
Excise Duties.					
Tinctures—New Zealand	200	983	*1,244	†2,036	‡1,638
Cigars, Cigarettes, and Snuff —New Zealand-manufactured	916	191	152	91	129
Tobacco — New Zealand manufactured	1,663	2,358	2,282	2,323	2,376
Beer—New Zealand	67,287	71,765	75,164	78,265	85,141
Totals, Excise Duties	70,066	75,297	78,842	82,715	89,284
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Revenue from Customs Duties per head of mean population (excluding Maoris)	2 9 11	2 13 0	2 13 3	2 14 5	2 16 10
Ditto (including Maoris)	2 7 3	2 10 3	2 10 6	2 11 8	2 14 0
Revenue from Excise Duties per head of mean population (excluding Maoris)	0 1 11·8	0 2 1·0	0 2 1·7	0 2 2·5	0 2 4
Ditto (including Maoris)	0 1 10·5	0 1 11·7	0 2 0·4	0 2 1·1	0 2 2·7

* Including £89 excise duty on culinary and flavouring essences. † Including £149 excise duty on culinary and flavouring essences, and £11 on perfumed spirits. ‡ Including £89 excise duty on culinary and flavouring essences.

The Customs revenue for the year 1900 amounted to £2,170,354, and the excise duties to £89,284. The revenue from Customs was £2 16s. 10d. per head of population excluding Maoris, and £2 14s. if they be included. In 1888 the Customs revenue was £2 6s. 2d. per head of European population, and from that time the proportion increased slowly year by year until 1892, when it reached

£2 11s. 6d. per head. During the next two years there was a falling-off; but 1895 and following years show increases, the proportion for 1900 being higher than in any year since 1883. Details for eleven years are given:—

CUSTOMS REVENUE PER HEAD OF EUROPEAN POPULATION.

	£	s.	d.		£	s.	d.
1890	2	9	3	1896	2	9	11
1891	2	9	7	1897	2	13	0
1892	2	11	6	1898	2	13	3
1893	2	10	4	1899	2	14	5
1894	2	6	4	1900	2	16	10
1895	2	6	9				

Dating from 1890, the taxation by way of Customs and excise duties together increased from £2 11s. 2d. in that year to £2 11s. 11d. in 1896, to £2 15s. 1d. in 1897, to £2 15s. 5d. in 1898, to £2 16s. 8d. in 1899, and to £2 19s. 2d. in 1900.

There was an alteration of tariff in 1895 in certain items, but the amount of duty paid in 1899 does not bear a higher proportion to the total value of imports (less specie) for that year than the duty paid in 1894, prior to the new tariff, to the imports of that year.

"In the year 1900 certain duties were lowered and exemptions granted. Tea is now charged only 2d. per pound, instead of 4d.; currants and raisins are lowered to 1d. per pound; candles are 1d.; cocoa and roasted coffee, 3d. There is also reduction on stearine for match making, on paraffin-wax, and wax matches. Patent and proprietary medicines bear 15 per cent. duty, also certain drugs and chemicals. Steam-engines, or parts thereof, are charged 5 per cent. The new exemptions are various.

With these circumstances there has been a greater import of taxable articles, which would seem to indicate that purchasing power had increased. It is at least certain that the value of imports rose from £5,990,177 (excluding specie), in 1894, to £10,207,326 in 1900, notwithstanding the changes of tariff.

The tariff has been given in full in this book (see pages 82 to 97.) The rates of duty levied include 16s. per gallon on spirits; 30s. per gallon on perfumed spirits; 7s. per pound on cigars and snuff; 17s. 6d. per 1,000 of 2½lb. and under, and 6d. per ounce weight over 2½lb. per 1,000, on cigarettes; 3s. 6d. per pound on manufactured and 2s. on unmanufactured tobacco. Sparkling wine is charged 9s. a gallon; Australian, 5s.; other kinds, 6s.; ale and beer, 2s. The duty on tea is 2d. the pound; on cocoa, chocolate, and chicory, 3d.; raw coffee, 2d.; roasted, 3d. Sugar, molasses, and treacle pay ½d., and glucose 1d. per pound. Opium is charged 40s. per pound. The remainder of the Customs revenue, with small exception, is made up of charges on goods by weight, *ad valorem* duties, ranging from 5 to 40 per cent., and receipts from the foreign parcels post. There is also an excise duty of 1s. per pound on tobacco; 1s. 6d. per pound on cigars, cigarettes, and snuff; 3d. per gallon on beer; 9d. per pound on tinctures, &c., manufactured in

the colony, containing more than 50 per cent. of proof spirit, and 3d. per pound when less than 50 per cent. Also, 12s. per gallon on culinary flavouring essences; and 20s. on perfumed spirits.

By "The Tobacco Excise Duties Act, 1896," the excise duty on cigarettes made in the colony is now (from the 31st December, 1896) 2s. 6d. per pound on machine-made and 1s. per pound on hand-made cigarettes.

"The Tobacco Act Amendment Act, 1896," enacts that all packages of manufactured tobacco shall be labelled before leaving the manufactory, and provides for the issue of warrants to use cutting-machines for cutting duty-paid manufactured tobacco for sale (or to be used in the manufacture of cigarettes by hand), and to manufacture cigarettes by hand, under certain conditions.

SECTION II.—EXPORTS AND TOTAL TRADE.

THE value of all the exports in 1900, exclusive of horses and forage sent to South Africa with the New Zealand Contingents, was £13,246,161; the value of New Zealand produce exported, £13,055,249: an average of £17 1s. 11d. per head of population, against £15 14s. 8d. for the previous year. The increase in the value of exports of New Zealand produce for 1900 over that for 1899 amounts to £1,255,509, a substantial advance of 10·64 per cent. This is a considerably higher rate of increase than the results for the year 1898 showed over those of 1897, when the amount was £728,721, and the percentage 7·59, but not so high as that for 1899 over 1898, which amounted to £1,474,752, or an advance of 14·28 per cent.

The value of merchandise imported in 1900 was, as previously shown, £10,207,326 so that the value of New Zealand produce exported during the year (£13,055,249) shows an excess of £2,847,923 over the imports; while the amount paid for interest and sinking fund of the public debt for the year ended 31st March, 1900, was £1,749,394. The value of New Zealand produce exported is thus proved to have exceeded the value of goods imported by a sum more than one million sterling in excess of the charges of the public debt—a position which, when associated with rising imports, must be considered as showing a very satisfactory aspect. It is a continuation of the same position that obtained in the year 1899. The interest and sinking fund on so much of the debt of the local bodies as was raised outside the colony was less than £300,000 for the year ended 31st March, 1900.

A comparative statement of exports according to value for the two years is given, showing the amounts for various principal articles, being the produce or manufacture of the colony, classified according to their nature into groups:—

THE MINE.	Year 1899.	Year 1900.	Increase in 1900.	Decrease in 1900.
	£	£	£	£
Coal	83,085	98,136	15,051	..
Gold	1,513,180	1,439,602	..	73,578
Silver, and minerals	47,836	52,474	4,638	..
Total	1,644,101	1,590,212	..	53,889

	Year 1899.	Year 1900.	Increase in 1900.	Decrease in 1900.
	£	£	£	£
THE FISHERIES.				
Fish	21,265	18,644	..	2,621
Oysters	2,128	1,952	..	176
Other	815	1,078	263	..
Total	24,208	21,674	..	2,534
THE FOREST.				
Fungus	10,593	7,192	..	3,401
Kauri-gum	607,919	622,293	14,374	..
Timber—				
Sawn and hewn	196,749	232,174	35,425	..
Other	2,482	1,485	..	997
Total	817,743	863,144	45,401	..
ANIMALS AND PRODUCE.				
Bacon and hams	14,364	16,777	2,413	..
Beef (salted)	7,831	9,530	1,699	..
Butter	571,799	740,620	168,821	..
Cheese	141,818	229,111	87,293	..
Hides	36,095	42,039	5,944	..
Live-stock	22,689	39,675	16,986	..
Preserved meats	90,910	94,524	3,614	..
Frozen meat	2,088,856	2,123,881	35,025	..
Rabbit-skins	81,118	41,689	..	39,429
Sausage-skins	42,823	43,158	335	..
Sheepskins and pelts	268,230	279,391	11,161	..
Tallow	311,649	368,473	56,824	..
Wool	4,324,627	4,749,196	424,569	..
Other	6,927	8,794	1,867	..
Total	8,009,736	8,786,858	777,122	..
AGRICULTURAL PRODUCTS.				
Bran and sharps	19,736	13,062	..	6,674
Chaff	109	75	..	34
Flour	10,299	17,044	6,745	..
Grain—				
Barley	17,816	28,235	10,419	..
Beans and peas	12,835	25,275	12,440	..
Maize	25,024	24,575	..	449
Malt	41,253	50,506	9,253	..
Oats	286,102	552,270	266,168	..
Wheat	338,476	351,494	13,018	..
Hops	29,045	13,874	..	15,171
Oatmeal	16,968	26,622	9,654	..
Potatoes	39,618	25,134	..	14,484
Seeds (grass and clover) ..	61,974	93,006	31,032	..
Other	14,423	9,393	..	5,030
Total	913,678	1,230,565	316,887	..

	Year 1899.	Year 1900.	Increase in 1900.	Decrease in 1900.
	£	£	£	£
MANUFACTURES.				
Apparel	3,328	3,654	326	..
Leather	98,319	112,867	14,548	..
Phormium (New Zealand hemp)	184,411	332,182	147,771	..
Woollen manufactures ..	11,014	12,528	1,514	..
Other manufactures	80,994	88,111	7,117	..
Total	378,066	549,342	171,276	..
Miscellaneous	12,208	13,454	1,246	..
Total exports (colonial produce and manufactures) ..	11,799,740	13,055,249	1,255,509	..
Specie	14,913	22,903	7,990	..
Other exports (British and foreign)	123,682	168,009	44,327	..
Total exports ..	£11,938,335	13,246,161	1,307,826	..

The class designated "Animals and Produce" shows by far the greatest value, the sum for 1900 being £8,786,858, which includes £4,749,196 for wool and £2,123,881 for frozen meat. The total value of exports in this class increased during the year by £777,122, on a total of £8,009,736 in 1899.

"The Mine" takes second place among the classes for total value, with an export of coal, gold, silver, and other minerals amounting to £1,590,212 for 1900, being a decrease of £53,889 on £1,644,101, the export for the previous year.

"Agricultural Products," principally grain, potatoes, and seeds, take third place, and show an advance of £316,887 on the value exported in 1899, every item composing the group, with the exception of potatoes, hops, maize, bran, and chaff, having largely increased.

"The Forest" shows the export for last year to be £863,144, which, on account of the development of the kauri-gum and timber industries, gives an increase of £45,401 since 1899.

"Manufactures" are set down at £549,342 in 1900, being £171,276 more than in the previous year. Phormium shows an excellent advance on the operations for 1899, with an increase of no less than £147,771 on the export of £184,411 in 1899. Woollen manufactures sent abroad increased slightly; and leather also advanced from £98,319 in 1899 to £112,867.

The smallest group in respect to value is "The Fisheries," which, however, shows a decrease in value. The total for the group was £21,674 last year.

The exports of New Zealand produce or manufacture for the two last years have also to be considered in relation to quantity, and the articles are again grouped in the next table according to the same classification as that used for purposes of comparing the values.

QUANTITIES OF THE PRINCIPAL ARTICLES OF NEW ZEALAND PRODUCE EXPORTED.

Items.		Year 1899.	Year 1900.	Increase in 1900.	Decrease in 1900.
The Mine:—					
Coal	Tons	89,480	112,707	23,227	..
Gold	Oz.	389,570	373,614	..	15,956
Silver	"	349,338	326,457	..	22,881
Minerals	Tons	1,444	2,335	891	..
The Fisheries:—					
Fish	Cwt.	12,424	11,283	..	1,141
Oysters	Doz.	254,810	234,992	..	19,818
Whalebone ..	Lb.	2,576	6,608	4,032	..
The Forest:—					
Fungus	Cwt.	7,012	4,139	..	2,873
Gum (kauri) ..	Tons	11,116	10,159	..	957
Timber (sawn and hewn)	Ft.	50,425,741	57,517,085	7,091,344	..
Animals and Produce:—					
Bacon and hams ..	Cwt.	4,376	5,334	958	..
Beef (salted) ..	"	7,206	8,192	986	..
Butter	"	136,086	172,583	36,497	..
Cheese	"	69,440	102,849	33,409	..
Hides	No.	41,036	47,292	6,256	..
Live-stock	"	5,361	5,674	313	..
Meats (preserved) ..	Cwt.	48,053	44,402	..	3,651
" (frozen) ..	"	1,865,827	1,844,831	..	20,996
Sausage skins ..	"	8,806	9,391	585	..
Skins (rabbit) ..	No.	7,891,648	5,690,893	..	2,200,755
" (sheep) and pelts	"	4,969,054	4,669,430	..	299,624
Tallow	Cwt.	338,620	367,780	29,160	..
Wool	Lb.	147,169,497	140,706,486	..	6,463,011
Agricultural Products:—					
Bran and sharps ..	Tons	7,187	4,492	..	2,695
Chaff	"	44	25	..	19
Flour	"	1,643	2,613	970	..
Grain, barley ..	Bush	125,549	243,048	117,499	..
" beans and peas	"	71,404	174,523	103,119	..
" maize ..	"	187,932	193,720	5,788	..
" malt ..	"	175,853	220,893	45,040	..
" oats ..	"	3,520,734	5,818,648	2,297,914	..
" wheat ..	"	2,901,676	2,867,069	..	34,607
Hops	Cwt.	6,228	2,876	..	3,352
Oatmeal	Tons	2,188	2,972	784	..
Potatoes	"	25,396	13,422	..	11,974
Seeds (grass and clover)	Bush*	214,575	351,630	137,055	..
Manufactures:—					
Ale and beer ..	Gals.	16,323	18,615	2,292	..
Cordage	Cwt.	976	1,532	556	..
Leather	Cwt.	17,365	18,131	766	..
Phormium (New Zealand hemp) ..	Tons	10,371	15,906	5,535	..
Soap	Cwt.	3,709	3,936	227	..

* At 20lb. to the bushel.

The numerical increases in such articles as butter, cheese, hides, tallow, grain, flour, coal, timber, seeds, and phormium are all most satisfactory, and in some cases (notably butter, cheese, grain, and phormium) very considerable; while, on the other hand, the wool export, as also that of rabbit-skins, sheepskins, and pelts, and some

other items (including kauri-gum), declined in 1900. The rates of increase and decrease for the principal articles are exhibited in the table:

INCREASES.

Export of	Rate of Increase per Cent. in 1900 over Quantity in 1899.	Export of	Rate of Increase per Cent. in 1900 over Quantity in 1899.
Whalebone .. Lb.	156·52	Coal .. Tons	25·96
Seeds (grass and clover) .. Bush.	63·87	Bacon and hams Cwt.	21·89
Minerals .. Tons	61·70	Hides .. No.	15·25
Flour .. Tons	59·04	Timber .. Ft.	14·06
Cordage .. Cwt.	56·97	Ale and beer .. Gals.	14·04
Phormium .. Tons	53·37	Beef (salted) .. Cwt.	13·68
Cheese .. Cwt.	48·11	Tallow .. Cwt.	8·61
Grain .. Bush.	36·30	Sausage skins .. Cwt.	6·64
Oatmeal .. Tons	35·83	Soap .. Cwt.	6·12
Butter .. Cwt.	26·82	Live-stock .. No.	5·84
		Leather .. Cwt.	4·41

DECREASES.

Export of	Rate of Decrease per Cent. in 1900 over Quantity in 1899.	Export of	Rate of Decrease per Cent. in 1900 over Quantity in 1899.
Hops .. Cwt.	53·82	Preserved meats Cwt.	7·60
Potatoes .. Tons	47·15	Silver .. Oz.	6·55
Chaff .. Tons	43·18	Sheepskins and pelts .. No.	5·86
Fungus .. Cwt.	40·97	Wool .. Lb.	4·39
Bran and sharps Tons	37·50	Gold .. Oz.	4·10
Skins (rabbit) .. No.	27·89	Wheat .. Bush.	1·19
Fish .. .. Cwt.	9·18	Frozen meat .. Cwt.	1·13
Kauri-gum .. Tons	8·61		
Oysters .. Doz.	7·78		

The position as to value in respect of a period of thirteen years, 1888 to 1900 inclusive, is presented in a table giving the domestic exports for each. The most important items of export given under the heading "Other New Zealand Produce" are coal, silver, minerals, fish, oysters, fungus, kauri-gum, timber, bacon and hams, salted and preserved meats, tallow, sheep- and rabbit-skins, hides, sausage-skins, and live-stock. The aggregate value of these in 1900 was £1,968,121.

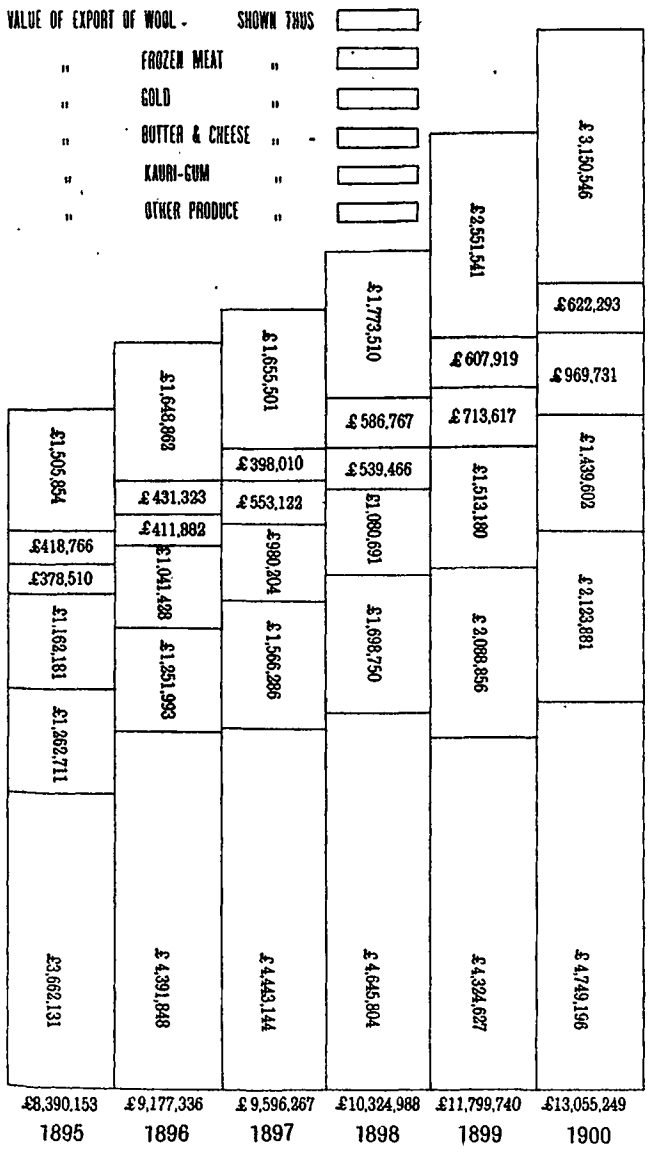
EXPORTS OF NEW ZEALAND PRODUCE.

Calendar Year.	Wool.	Gold.	Frozen Meat.	Butter and Cheese.	Agricultural Produce.	Manufactures	Other N.Z. Produce.	Total.
	£	£	£	£	£	£	£	£
1888	3,115,098	914,309	628,800	197,170	905,907	233,383	1,260,461	7,255,128
1889	3,976,375	785,490	783,374	213,945	1,424,297	569,880	1,288,647	9,042,008
1890	4,150,599	751,360	1,087,617	207,687	1,289,864	547,947	1,393,687	9,428,761
1891	4,129,686	1,007,172	1,194,724	235,933	894,467	420,357	1,516,755	9,400,094
1892	4,313,307	951,963	1,033,377	318,204	1,035,637	367,677	1,345,703	9,365,868
1893	3,774,738	915,921	1,085,167	354,271	716,546	345,636	1,365,164	8,557,443
1894	4,827,016	887,865	1,194,545	366,483	317,655	224,958	1,266,626	9,085,148
1895	3,662,131	1,162,181	1,262,711	378,510	326,029	188,702	1,409,889	8,390,153
1896	4,391,848	1,041,428	1,251,993	411,882	572,355	198,081	1,309,749	9,177,336
1897	4,443,144	980,204	1,566,286	553,122	495,175	197,601	1,360,735	9,596,267
1898	4,645,804	1,080,691	1,698,750	539,466	410,677	253,805	1,695,795	10,324,988
1899	4,324,627	1,513,180	2,088,856	713,617	913,678	378,066	1,867,716	11,799,740
1900	4,749,196	1,439,602	2,123,881	969,731	1,230,565	549,342	1,992,932	13,055,249

EXPORTS.

RISE IN VALUE OF EXPORTS OF NEW ZEALAND PRODUCE, ETC.

1895-1900.



The preceding table shows that the value of the exports of New Zealand produce fell from £9,428,761 in 1890 to £8,390,153 in 1895, rose in 1896 to £9,177,336, in 1897 to £9,596,267, in 1898 to £10,324,988, in 1899 to £11,799,740, and in 1900 to £13,055,249.

Thus there was an increase of exports since 1895, or in the five years 1896, 1897, 1898, 1899, and 1900 to the value of £4,665,096, all New Zealand produce, and far more than a recovery to the figures for 1890 and 1891 (after which had followed a decrease in values). With the amount of increase in money must be considered the state of prices of the various kinds of produce.

The export of wool, measured by quantity, rose from 102,817,077 lb. in 1890 to 140,706,486 lb. in 1900, or at the rate of 36·85 per cent., and that of frozen meat from 898,894 cwt. to 1,844,831 cwt.

Gold, too, which was exported to the quantity of 187,641 oz. in 1890, increased to 373,614 oz. in 1900, the rate of increase being upwards of 99·11 per cent.

Re-exports.

The re-export trade of the colony would seem from the subjoined figures to have been almost stationary for the last ten years, the figures for 1890 and 1900 only differing by a sum of £27,454. The re-exports of merchandise in 1900 were valued at £168,009, or only a little more than 1 per cent. of the total exports, excluding specie.

EXPORTS OF BRITISH, FOREIGN, AND OTHER COLONIAL PRODUCE (EXCLUDING SPECIE).

	£		£
1890	140,555	1896	122,571
1891	160,765	1897	144,955
1892	125,052	1898	124,850
1893	123,402	1899	123,682
1894	136,402	1900	168,009
1895	127,966		

With these sums may be contrasted the re-export trade of New South Wales—a colony having less than double the population of New Zealand—which, exclusive of specie, amounted in 1898 to £4,707,200, or no less than 22·76 per cent. of the value of all goods exported.

Exports from the North and Middle Islands.

The exports from the North and Middle Islands respectively, excluding "Parcels post," during the last two years were as under:—

Year.	North Island.	Middle Island.	Proportion to Total Export.	
	£	£	North Island.	Middle Island
1899	6,011,239	5,916,290	50·40	49·60
1900	6,707,964	6,526,397	50 70	49·30

The North Island exported in 1900 rather more than half of the total for the two islands.

Wool exported and produced.

The quantity of wool exported in 1900, as previously shown, was 140,706,486 lb., valued at £4,749,196, a decrease of 6,463,011 lb., or

4·39 per cent. on the quantity exported in the previous year, but an increase of £424,569, or 9·82 per cent. on the value. This falling off in the wool export is probably mainly due to the disposition on the part of pastoralists to breed sheep for the frozen-meat industry rather than for wool. The annual production of wool is best estimated by taking the exports for the twelve months immediately preceding the commencement of shearing, and adding thereto the quantity used in the colony for manufacturing purposes.

The following shows the produce for each of the last thirteen years ending on the 30th September :—

Year ending 30th September.	Quantity exported.	Quantity purchased by Local Mills.	Total Annual Produce.
	Lb.	Lb.	Lb.
1888	89,276,268	4,079,563	93,355,831
1889	95,618,507	3,556,004	99,174,511
1890	102,522,185	2,979,293	105,501,478
1891	108,619,473	2,918,073	111,537,546
1892	110,860,050	3,388,954	114,249,004
1893	119,643,874	2,629,855	122,273,729
1894	128,480,457	2,476,155	130,956,612
1895	129,333,769	3,299,132	132,632,901
1896	128,309,673	3,989,934	132,299,607
1897	134,410,955	3,298,469	137,709,424
1898	150,401,399	3,763,831	154,165,230
1899	143,644,203	4,258,505	147,902,708
1900	144,829,515	3,223,392	148,052,907

From these figures it appears that, notwithstanding the decrease for the last two years, the wool-clip has increased by over 60 per cent. during the last thirteen years.

To arrive at a perfectly correct estimate of the increase in wool production it would be necessary to take into consideration the proportion of greasy, scoured (and sliped), and washed wool exported each year, the washing process of course greatly reducing the weight. The percentages of greasy, scoured, and washed wool to the total quantities exported during the last three years are :—

Years.	Greasy. Per Cent.	Scoured and Sliped. Per Cent.	Washed. Per Cent.
1898	78 62	20·36	1·02
1899	77 54	21·64	0·82
1900	78·62	20·10	1·28

The increase in the wool-production is, of course, mainly due to the greater number of sheep—namely, 19,355,195 in April, 1900, against 15,423,328 in May, 1889. A comparative statement for several years is supplied, showing the number of flocks in groups of sizes :—

NUMBER OF FLOCKS, 1890 TO 1900.

Size of Flocks.	1890.	1892.	1894.	1896.	1898.	1899.	1900.
Under 500	7,662	8,822	10,314	12,028	12,836	12,719	12,239
500 and under 1,000..	1,528	2,033	2,427	2,605	2,708	2,656	2,810
1,000 „ 2,000..	854	1,193	1,409	1,460	2,412*	2,519†	2,621‡
2,000 „ 5,000..	586	761	933	892			
5,000 „ 10,000..	283	314	345	340	341	363	352
10,000 „ 20,000..	236	231	230	231	231	204	196
20,000 and upwards ..	160	176	179	147	144	138	139
Totals ..	11,309	13,530	15,837	17,703	18,722	18,599	18,357

* From 1,000 to 2,500, 1,798 flocks; from 2,500 to 5,000, 614 flocks. † From 1,000 to 2,500, 1,880 flocks; from 2,500 to 5,000, 639 flocks. ‡ From 1,000 to 2,500, 1,971 flocks; from 2,500 to 5,000, 650 flocks.

It will be apparent that the general tendency of increase since the year 1890 is towards the multiplication of the smaller flocks, whose owners are better able to cope with the rabbit difficulty than the large runholders.

Export of Rabbit-skins.

Prior to 1878 rabbit-skins were a very small item in the exports, but in that year the number sent out of the colony amounted to 3,951,209. Ten years after (1888) the export had risen to 11,809,407, from which it increased to 17,041,106 in 1893, the greatest number as yet exported in a year. From 1895 the fall was rapid, and the export for 1898 only reached 6,607,934 skins. In 1899 there was a slight upward tendency, the number exported being 7,891,648, which, however, fell to 5,690,893 in the year 1900.

The figures for the years in which there has been decline are quoted :—

Year.	Number of Rabbit-skins exported.	Year.	Number of Rabbit-skins exported.
1893	17,041,106	1897	8,099,334
1894	14,267,385	1898	6,607,934
1895	15,229,314	1899	7,891,648
1896	10,828,612	1900	5,690,893

From the above it will be seen that the importance of the export has very much diminished. The fall, represented in money value, has been :—

Year.	Value of Rabbit-skins exported. £	Year.	Value of Rabbit-skins exported. £
1893	138,952	1897	47,472
1894	87,993	1898	51,607
1895	85,022	1899	81,118
1896	65,599	1900	41,689

While the amount of money received for this produce of the colony shows less profit than formerly, it may be a satisfactory result, as seemingly indicating some abatement of the rabbit pest.

Large quantities of frozen rabbits are now exported, and are alluded to in the remarks on the frozen meat industry on the next page.

Export of Sheepskins and Pelts.

These form a more important article of export at the present time than the rabbit-skins, though in the year 1888 the position was the reverse as regards value in money. In 1888 the number of sheepskins and pelts sent away from New Zealand was 1,646,401, against 4,669,430 in 1900, a rise of 183·61 per cent. for the period between those years. The value increased from £83,574 to £279,391, or 234·30 per cent. Figures for the last seven years are quoted:—

Year.	Export of Sheepskins and Pelts. No.	Year.	Export of Sheepskins and Pelts. No.
1894 ..	2,681,552	1898 ..	4,995,325
1895 ..	3,230,539	1899 ..	4,960,054
1896 ..	3,001,791	1900 ..	4,669,430
1897 ..	3,688,051		

Export of Tallow.

Besides wool and meat, tallow is largely exported, and since the year 1888, when 136,460 cwt. were sent away, the export increased to 267,780 cwt. in 1900. In value this export considerably exceeds that of either sheepskins or rabbit-skins, and the money is indeed more than the total for those two articles taken together. The seven latest years show the following results:—

TALLOW EXPORTED.

Years.	Cwt.	£	Years.	Cwt.	£
1894 ..	199,400	204,499	1898 ..	347,160	302,141
1895 ..	263,560	260,999	1899 ..	338,620	311,649
1896 ..	222,540	208,821	1900 ..	367,780	368,473
1897 ..	310,200	259,964			

Frozen Meat exported.

Frozen meat now takes second place among the exports of New Zealand produce. In 1900, 1,844,831 cwt., valued at £2,123,881, were shipped in the colony. An account of the development of the industry was given in a special article in the Year-book, 1894. The total export for each year since the commencement of the trade has been:—

Year.	Lb.	Year.	Lb.
1882 ..	1,707,328	1892 ..	97,636,557
1883 ..	9,853,200	1893 ..	100,262,453
1884 ..	28,445,228	1894 ..	114,827,216
1885 ..	33,204,976	1895 ..	127,018,864
1886 ..	38,758,160	1896 ..	123,576,544
1887 ..	45,035,984	1897 ..	157,687,152
1888 ..	61,857,376	1898 ..	173,798,576
1889 ..	73,564,064	1899 ..	208,972,624
1890 ..	100,934,756	1900 ..	206,621,072
1891 ..	110,199,082		

RISE IN THE EXPORT OF CERTAIN PRINCIPAL ARTICLES THE PRODUCE OF THE COLONY.

1895-1900.

(SEE ALSO PRECEDING DIAGRAM.)

The above figures for 1899 include 129,224 cwt., or 4,876,534 (number) of frozen rabbits and hares in the skin; and those for 1900 include 12,260 (731 cwt.) of hares, and 6,501,997 rabbits, weighing 167,971 cwt., valued at £154,856, so that these animals can hardly now be looked upon as wholly a nuisance.

To ascertain the total value of the meat export in 1900 it is necessary to take into consideration, with the amount of £2,123,881, value of frozen meat before stated, £11,330 for frozen fish; also the value of preserved meats, £94,524; of salted beef and pork, £9,530; and of bacon and hams, £16,777.

Gold exported.

The amount of gold exported in 1900 was 373,614 oz., a decrease of 15,956 oz. on the quantity exported in 1899.

The total quantity of gold entered for duty to the 31st December, 1900, which may be reckoned as approximately the amount obtained in the colony, was 14,608,901 oz., of the value of £57,406,100. For fuller information see Section XV., "Mining."

Grain exported.

The value of the grain exported in 1900 was £1,034,014. The grain exports for 1899 and 1900 were made up as under:—

	1899.		1900.	
	Bushels.	£	Bushels.	£
Wheat	2,901,676	338,476	2,867,069	351,494
Oats	3,520,734	286,102	5,818,648	552,270
Barley	125,549	17,816	243,048	28,235
Malt	175,853	41,253	220,893	50,506
Maize	187,932	25,024	193,720	24,575
Peas and beans	71,406	12,836	174,523	25,275
Rye and unenumerated ..	2,865	317	11,946	1,659
Total quantity and value	6,986,015	£721,824	9,529,847	£1,034,014

Compared with the previous year the quantity and value of grain exported in 1900 show excellent increase.

Until 1899 the decline in the export of wheat had been very great, as will be seen by the following figures:—

Year.	Wheat exported. Bushels.	Year.	Wheat exported. Bushels.
1890	4,467,026	1898	10,090
1892	2,460,774	1899	2,901,676
1894	228,904	1900	2,867,069
1896	453,123		

The imports of wheat during 1898 exceeded the exports by upwards of 50,000 bushels, but in 1899 and 1900 the imports were practically nil, the small quantity introduced into the colony being for seeding purposes only.

In oats, the quantity exported in 1900 shows a large increase over that for the previous year:—

Year.	Export of Oats. Bushels.	Year.	Export of Oats. Bushels.
1891	4,052,414	1898	816,210
1892	3,830,444	1899	3,520,734
1894	1,963,288	1900	5,818,648
1896	2,247,053		

Similarly, with barley, the export rose from 125,519 bushels in 1899 to 243,048 bushels in 1900; beans and peas show 174,523 bushels exported in 1900, against 71,406 bushels in the previous year; maize, 193,720 bushels against 187,932 bushels. The export of malt also increased, the quantities having been 220,893 bushels in 1900, and 175,853 in 1899.

The acreages under cereals for the last three years have been :—

	1898-99. Acres.	1899-1900. Acres.	1900-1901. Acres.
Land in wheat (for threshing) ..	399,034	269,749	206,465
" oats " ..	417,320	398,243	449,534
" barley " ..	45,671	48,003	30,831

Butter and Cheese exported.

The total quantity of butter and cheese exported in the past twelve years, and the amount of either commodity sent to the United Kingdom is tabulated :—

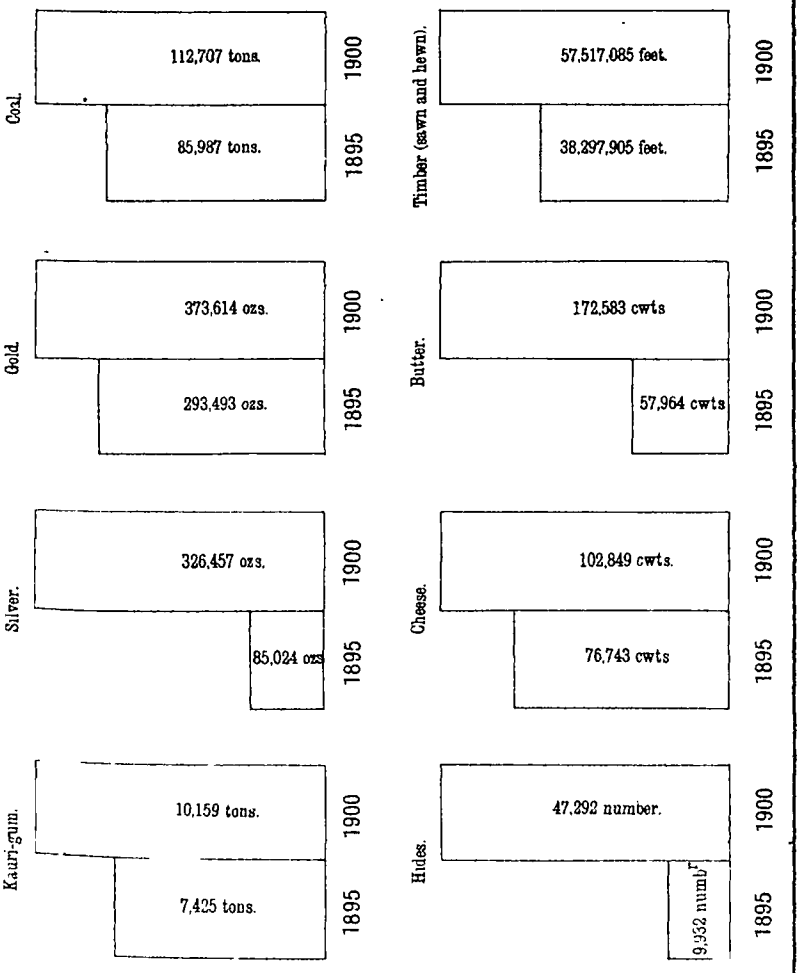
Year.	Total Export of Butter.	Butter Exported to the United Kingdom.	Total Export of Cheese.	Cheese Exported to the United Kingdom.
	Cwt.	Cwt.	Cwt.	Cwt.
1889	37,955	21,099	26,558	7,633
1890	34,816	26,579	40,451	31,043
1891	39,430	28,989	39,770	29,565
1892	53,930	41,509	41,493	30,000
1893	58,149	52,363	46,261	41,567
1894	60,771	58,845	55,655	54,540
1895	57,964	55,194	76,743	73,369
1896	71,353	60,092	71,372	58,692
1897	99,002	79,849	77,683	67,681
1898	96,801	80,814	68,711	41,412
1899	136,086	121,502	69,440	40,901
1900	172,583	165,871	102,849	81,908

Of the butter exported in 1900, 165,871 cwt., valued at £710,105, were shipped to the United Kingdom; 1,525 cwt., value £6,680, to New South Wales; 396 cwt., value £1,669, to Victoria; 1,148 cwt., value £5,287, to Tasmania; 575 cwt., value £2,517, to Western Australia; 126 cwt., value £483, to South Australia; 382 cwt., value £1,663, to Fiji; 1,805 cwt., value £8,353, to Cape Colony and Natal; 748 cwt., value £3,798, to the South Seas; 5 cwt., value £24, to the United States of America, West Coast; 2 cwt., value £11, to Japan.

Of the cheese exported, 81,908 cwt., valued at £179,192, were sent to the United Kingdom; 13,144 cwt., value £30,523, to New South

RISE IN THE EXPORT OF CERTAIN PRINCIPAL ARTICLES THE PRODUCE OF THE COLONY. 1895-1900.

(SEE ALSO FOLLOWING DIAGRAM.)



Wales; 4,167 cwt., value £10,021, to Victoria; 2,314 cwt., value £5,746, to Western Australia; and 515 cwt., value £1,303, to the other Australasian Colonies. While the quantity of butter exported in 1900, 172,583 cwt., shows an increase of 355 per cent. on the quantity exported in 1889, the increase in the export of cheese during the twelve years has been at the rate of 287 per cent.—102,849 cwt. in 1900, as against 26,558 cwt. in 1889.

Phormium exported.

Phormium, of which 15,906 tons (excluding 458 tons of tow), valued at £332,182, were exported in 1900, shows improvement in the export, on comparing the figures for last year with those for 1899, when the quantity sent away was 10,371 tons. Outside of the question of prices, a large permanent development of this industry depends on the cultivation and careful selection of the plants used, and on improvements in the method of preparing the fibre.

Kauri-gum exported.

The export for 1900 (10,159 tons) is again a substantial one. The value was £622,293, or an average of £61 5s. 1d. per ton. Full information as to the uses of this resin and the kauri-gum industry generally is given in a special article in Part III. of the Year-book for 1900. It embraces interesting matter from the report of the Royal Commission which investigated the whole subject in 1898.

Exports from different Ports, &c.

The following table gives the values of the exports from each port in New Zealand for the last two years, arranged in order of magnitude for 1900:—

	1900.	1899.
	£	£
Lyttelton	2,522,912	2,311,293
Wellington	2,345,395	1,896,291
Auckland	2,068,361	1,860,604
Dunedin	1,478,071	1,316,385
Timaru	932,949	726,476
Napier	770,159	988,466
Invercargill and Bluff	741,750	751,881
Poverty Bay	450,125	283,906
New Plymouth	399,700	336,965
Wanganui	386,960	382,625
Oamaru	324,616	205,609
Greymouth	255,385	314,342
Kaipara	144,680	136,219
Wairau and Picton	141,039	149,549
Waitara	104,221	77,391
Nelson	58,303	75,736
Westport	45,897	33,552
Patea	37,717	48,737
Hokitika	25,475	31,467
Tauranga	646	35

The increase of exports during 1900 was £449,104 at Wellington, £211,619 at Lyttelton, £207,757 at Auckland, and £161,686 at Dunedin.

Details of all Exports, 1900.

Articles exported.		Quantities.		Value in Sterling.		
		Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
				£	£	£
Acid, carbolic	lb.	..	21	..	1	1
Agricultural implements	..	..	..	303	60	363
Alkali—Potash, caustic	cwt.	..	60	..	105	105
Alum	"	..	5	..	4	4
Animals, living—						
Birds	No.	5	..	5	..	5
Cattle (horned)	"	616	..	5,856	..	5,856
Deer	"	1	..	20	..	20
Dogs	"	16	..	62	..	62
Horses	"	756	6	25,450	500	25,950
Ostriches	"	2	..	30	..	30
Pigs	"	462	..	737	..	737
Poultry	"	2,596	..	415	..	415
Sheep	"	3,840	..	7,092	..	7,092
Other kinds	"	8	..	8	..	8
Apparel and slops	..	..	..	3,654	1,935	5,589
Arms, ammunition, and explosives—						
Caps, percussion	No.	..	110,000	..	18	18
Cartridges	"	..	63,200	..	204	204
Cartridge-cases	"	..	2,000	..	6	6
Detonators for dynamite, &c.	"	..	16,000	..	35	35
Dynamite	lb.	..	2,100	..	166	166
Firearms	No.	1	67	2	336	338
Fuse	coils	..	91	..	15	15
Lithofracteur, cordite, &c.	lb.	..	8,475	..	550	550
Ordnance stores	"	..	..	24	828	852
Powder, blasting	"	..	24,100	..	692	692
Powder, sporting	"	..	3,375	..	319	319
Shot	cwt.	..	19	..	38	38
Bacon and hams—						
Bacon	cwt.	2,591	..	7,200	..	7,200
Hams	"	2,743	..	9,577	..	9,577
Bags and sacks—						
Cornsacks	doz.	..	7,018	..	1,988	1,988
Unenumerated	"	551	1,872	120	425	545
Basketware and wickerware	..	..	..	7	..	7
Beer	galls.	18,615	10,029	2,036	2,232	4,268
Belting, leather	lb.	..	46	..	6	6
Belting, other than leather	..	..	..	..	115	115
Beverages, non-alcoholic—						
Aerated and mineral waters, doz		3,005	29	515	6	521
Limejuice, unsweetened	galls.	..	22,852	..	1,458	1,458
Bicycles and tricycles	No.	1	223	15	1,788	1,803
Materials for	..	..	..	5	1,546	1,551
Biscuits—						
Fancy and other kinds	lb.	4,243	..	85	..	85

DETAILS OF ALL EXPORTS, 1900—*continued.*

Articles exported.		Quantities.		Value in Sterling.		
		Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
Biscuits—*continued.*				£	£	£
Ship's plain	cwt.	5,376	2	4,000	1	4,001
Boats	No.	18	1	2,277	50	2,327
Bones	tons	13	18	45	86	131
Books, printed	..	..	..	1,705	2,999	4,704
Boots and shoes	doz. prs.	110	161	534	541	1,075
Bran	tons	3,458	..	9,589	..	9,589
Brass—						
Pigs, bars, tubes, or sheets	cwt.	..	9	..	10	10
Bricks, Fire	No.	23,400	..	193	..	193
Brushware and brooms	..	..	..	12	3	15
Buckets and tubs, Iron	doz.	..	½	..	1	1
Butter	cwt.	172,583	..	740,620	..	740,620
Candles	lb.	..	14,575	..	369	369
Canes and rattans	..	..	..	7	1	8
Canvas	..	..	..	1	164	165
Carpeting and druggeting	..	..	..	..	577	577
Carriages, &c.—						
Carriages	No.	12	..	336	..	336
Carts, drays, and wagons	"	88	..	888	..	888
Perambulators	"	3	1	16	2	18
Casks, empty	No.	755	1,426	363	894	1,257
Cement	barrels	70	269	39	158	197
Chaff	tons	25	..	75	..	75
Chains	cwt.	..	5	..	5	5
Cheese	"	102,849	..	229,111	..	229,111
Chinaware	..	..	..	..	223	223
Clocks	No.	..	10	..	6	6
Coals	tons	112,707	1,651	98,136	1,438	99,574
Cocoa and Chocolate	lb.	..	31,346	..	576	576
Coffee—						
Raw	"	50	58,161	3	1,761	1,764
Roasted	"	298	474	17	29	46
Confectionery—						
Chocolate in fancy boxes	..	..	..	..	189	189
Unenumerated	lb.	14,630	2,635	392	132	524
Copper—						
Pig, bar, and sheet	cwt.	5	60	27	240	267
Manufactures	..	..	..	40	23	63
Copra	tons	..	509	..	5,289	5,289
Cordage	cwt.	1,532	256	3,128	530	3,658
" iron and steel	"	..	24	..	49	49
Cotton piece-goods, namely,—						
Calico, white and grey	..	..	..	..	855	855
Cheese-cloth	..	..	..	..	15	15
Shirtings	..	..	..	..	47	47
Tubular-woven cotton-cloth	..	..	..	..	60	60
Waterproof material	..	..	..	..	25	25
Unenumerated	..	..	..	..	6,044	6,044

DETAILS OF ALL EXPORTS, 1900—*continued.*

Articles exported.	Quantities.		Value in Sterling.		
	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
			£	£	£
Cotton—					
Raw .. .. lb.	..	6,432	..	121	121
Waste .. .. cwt.	..	9	..	15	15
Cutlery	..	..	..	257	257
Doors .. .. No.	409	..	324	..	324
Drapery	..	..	392	1,547	1,939
Drugs, chemicals, and druggists' wares—					
Baking powder	..	..	..	54	54
Chemicals n.o.e.	..	..	..	86	86
Drugs, druggists' sundries, and apothecaries' wares ..	..	..	290	2,270	2,560
Medicinal barks, leaves, &c. ..	..	..	..	13	13
Sheep-dip	..	..	796	1,537	2,333
Disinfectants	..	..	1	402	403
Insecticides	..	..	17	..	17
Earthenware	..	..	385	1,813	2,198
Eggs .. .. doz.	1,981	..	88	..	88
Engine-packing .. cwt.	..	12	..	31	31
Essences, flavoring .. galls.	..	10	..	32	32
Essential oils.. .. lb.	..	918	..	244	244
Fancy goods and toys.. ..	..	..	1,388	2,111	3,499
Felt sheathing .. cwt.	4	..	4	..	4
Fireworks	..	..	1	2	3
Fish—					
Dried, pickled and salted cwt.	66	74	116	126	242
Potted and preserved lb.	278,112	57,892	7,198	1,621	8,819
Frozen .. .. cwt.	8,754	..	11,330	..	11,330
Ova .. .. No.	207,000	..	207	..	207
Fishing-tackle	..	..	..	122	122
Floor-cloth and oil-cloth ..	..	..	..	25	25
Flour .. .. tons.	2,613	..	17,044	..	17,044
Foods, Animal—					
Unenumerated	..	..	2,101	..	2,101
Foods, farinaceous—					
Arrowroot .. lb.	..	785	..	14	14
Maizena and cornflour "	..	2,120	..	22	22
Unenumerated	..	..	164	..	164
Fruits—					
Bottled and preserved doz.	278	166	100	60	160
Dried: Currants .. lb.	..	20,165	..	266	266
Raisins .. .. "	..	41,963	..	775	775
Unenumerated .. "	206	16,161	7	391	398
Fresh .. .. "	58,453	5,270	585	33	618
Fungus .. .. cwt.	4,139	..	7,192	..	7,192
Furniture and upholstery ..	..	..	354	608	962
Furniture, knife, and plate powder and polish	..	..	..	35	35

DETAILS OF ALL EXPORTS, 1900—*continued.*

Articles exported.		Quantities.		Value in Sterling.		
		Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
				£	£	£
Furs		..	..	8	10	18
Glass bottles, empty		..	..	..	57	57
Glassware		..	..	31	528	559
Glue and size	cwt.	268	..	117	..	117
Glycerine	"	1,091	..	1,410	..	1,410
Gold	oz.	373,614	18	1,439,602	76	1,439,678
Grain and pulse—						
Barley	bush.	243,048	..	28,235	..	28,235
Beans and peas	"	174,523	..	25,275	..	25,275
Maize	"	193,720	..	24,575	..	24,575
Oats	"	5,818,648	..	552,270	..	552,270
Rye	"	10,913	..	1,330	..	1,330
Wheat	"	2,867,069	..	351,494	..	351,494
Unenumerated	"	1,033	4	329	2	331
Grease	cwt.	..	21	..	21	21
Gum, kauri	tons	10 159	..	622,293	..	622,293
Haberdashery		..	..	..	385	385
Buttons		..	..	..	89	89
Sewing-cottons, silks, and threads		..	..	..	182	182
Hair	cwt.	569	..	3,181	..	3,181
Hardware, holloware, and ironmongery		..	..	257	2,701	2,958
Hats and caps	doz.	14	200	44	452	496
Hay and straw	tons	314	..	1,115	..	1,115
Hemp	"	1¼	..	90	..	90
Hides	No.	47,292	..	42,039	..	42,039
Honey	lb.	16,628	..	318	..	318
Hops	cwt.	2,876	15	13,874	72	13,946
Horns and hoofs	tons	83	..	1,216	..	1,216
Hosiery		..	..	697	630	1,327
Indiarubber and guttapercha goods		..	..	32	336	368
Instruments, musical—						
Harmoniums and organs	No.	..	5	..	57	57
Pianofortes	"	..	35	..	1,122	1,122
Unenumerated		..	..	2	568	570
Instruments, optical		..	..	..	51	51
" scientific		..	..	34	555	589
" surgical and dental		..	..	..	178	178
" surveying		..	..	..	50	50
Iron and steel—						
Bar, bolt, and rod	tons	16	23	242	421	663
Bolts and nuts	cwt.	4	10	5	13	18
Castings for ships	tons	..	4½	..	433	433
Galvanised manufactures		..	..	344	294	638
Hoop, galvanised	tons	..	2	..	36	36
Pipes and fittings	"	..	2	..	40	40
Sheet and plate		..	3	..	31	31

DETAILS OF ALL EXPORTS, 1900—*continued.*

Articles exported.		Quantities.		Value in Sterling.		
		Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
Iron and steel—*continued.*				£	£	£
Sheet, galvanis'd corrugated	cwt	..	3,666	..	3,936	3,936
Plain, galvanised ..	"	..	43	..	67	67
Tanks, each 400 galls.	No.	..	57	..	193	193
Tanks, each 200 galls.	"	..	10	..	19	19
Wire, fencing, barbed	tons	..	6½	..	94	94
Wire, fencing, plain	"	..	2	..	38	38
Wire netting ..	..	..	..	..	62	62
Unenumerated ..	tons	4	42	10	47	57
Jams, jellies, and preserves	lb.	27,982	10,178	2,388	176	2,564
Jellies, concentrated ..	"	..	972	..	31	31
Jewellery	..	..	..	113	756	869
Lamps and lanterns ..	..	..	..	..	112	112
Lard	cwt.	241	..	463	..	463
Lead, pigs and bars ..	tons	..	1	..	18	18
Leather	cwt.	18,131	34	112,867	631	113,498
Leather manufactures—						
Boot and shoe vamps, uppers, &c.	..	..	..	..	21	21
Unenumerated ..	..	..	..	..	49	49
Lime	bush.	4,116	..	219	..	219
Linseed	centals	565	..	316	..	316
Machinery and machines—						
Agricultural ..	..	..	..	5,151	1,209	6,360
Dairying	..	..	..	6	853	859
Dredging	..	..	..	3,341	14	3,355
Electric	..	..	..	..	29	29
Flour-milling ..	..	..	..	..	45	45
Gas- and oil-engines ..	No.	..	3	..	161	161
Gas-making ..	..	..	..	..	56	56
Mining	..	..	..	1,419	..	1,419
Paper-milling ..	..	..	..	..	178	178
Refrigerating ..	..	..	..	2	176	178
Sewing and knitting	No.	..	205	..	752	752
Wood-working ..	..	..	..	..	96	96
Wool-pressing ..	..	..	..	540	..	540
Woollen-milling ..	..	..	..	42	70	112
Unenumerated ..	..	..	..	1,187	1,662	2,849
Materials for, and parts of	..	..	..	..	21	21
Malt	bush.	220,893	..	50,506	..	50,506
Manures, unenumerated	tons	96	..	506	..	506
Marble, dressed ..	..	..	..	..	10	10
Matches, wooden ..	gross	..	2,050	..	186	186
Mats and matting ..	..	..	..	703	..	703
Meal, oaten	centals	59,439	..	26,622	..	26,622
Meats—						
Beef, frozen ..	cwt.	312,291	..	362,888	..	362,888
" salted ..	"	7,991	..	9,186	..	9,186
Kidneys, frozen ..	"	4,148	..	7,587	..	7,587

DETAILS OF ALL EXPORTS, 1900—*continued.*

Articles exported.	Quantities.		Value in Sterling.		
	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
Meats—*continued.*			£	£	£
Lamb, frozen .. carcases	1,351,145				
=cwt.	454,976	..	640,626	..	640,626
Mutton, frozen (whole carcases) .. carcases	1,585,238				
=cwt.	886,137	..	880,167	..	880,167
Mutton (joints), frozen cwt.	63,617	..	68,929	..	68,929
Pork, frozen .. "	1,759	..	2,937	..	2,937
" salted .. "	201	..	344	..	344
Veal, frozen .. "	205	..	272	..	272
Other kinds, frozen .. "	2,996	..	5,619	..	5,619
Rabbits, frozen in the skin No.	6,501,997				
=cwt.	167,971	..	154,075	..	154,075
Hares, frozen in the skin No.	12,260				
= cwt.	731	..	781	..	781
Potted and preserved "	44,402	8	94,524	17	94,541
Extract of meat .. lb.	4,730	..	586	..	586
Unenumerated .. cwt.	319	..	706	..	706
Medicines, patent and proprietary	..	..	797	17,679	18,476
Metal, Manufactures of ..	..	..	1,867	4,992	6,859
Anchors .. .. No.	..	1	..	7	7
Typewriters .. "	..	4	..	78	78
Metal, old .. .. cwt.	6,323	80	3,046	240	3,286
Milk, preserved .. lb.	560,528	39,494	10,526	840	11,366
Millinery—					
Feathers, ornamental ..	..	..	152	..	152
Other kinds	..	..	3	72	75
Minerals—					
Antimony ore .. cwt.	59	..	101	..	101
Chrome ore .. .. tons	28	..	110	..	110
Copper ore .. .. "	12	..	45	..	45
Manganese .. "	166	..	588	..	588
Quartz, auriferous .. "	219	..	4,450	..	4,450
Scheelite ore .. "	54	..	2,635	..	2,635
Silver ore .. .. "	131	..	559	..	559
Sulphur .. .. "	1,692	..	4,824	..	4,824
Tin ore .. .. "	1	..	100	..	100
Unenumerated .. "	29	..	183	..	183
Nails .. .. cwt.	..	511	..	500	500
Nuts—					
Almonds in shell .. lb.	..	441	..	1	10
Shelled .. .. "	..	83	..	6	6
Barbary .. .. "	..	217	..	8	8
Unenumerated .. "	90	..	2	..	2
Oil—					
Castor, bulk .. galls.	..	688	..	81	81
Colza .. .. "	..	1,067	..	159	159
Cocoanut .. .. "	10,255	..	1,069	..	1,069
Fish, penguin, and seal "	..	4,448	..	303	303

DETAILS OF ALL EXPORTS, 1900—*continued.*

Articles exported.		Quantities.		Value in Sterling.		
		Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
Oil—*continued.*				£	£	£
Linseed	galls.	..	4,940	..	791	791
Mineral, kerosene	"	..	251,440	..	11,436	11,436
Neatsfoot	"	105	..	6	..	6
Olive, bulk	"	..	605	..	86	86
" bottled	"	..	10	..	4	4
Whale	"	1,852	..	134	..	134
Unenumerated, bulk	"	2,536	7,874	188	642	830
" bottled	"	..	18	..	7	7
Oilmen's stores	..	..	..	364	1,113	1,497
Onions	cwt.	30,697	..	4,001	..	4,001
Opium	lb.	..	90	..	69	69
Oysters	doz	234,992	..	1,952	..	1,952
Paints and colours—						
Ground in oil	cwt.	..	561	..	479	479
Mixed ready for use	"	3	182	15	741	756
Unenumerated	"	211	2	96	2	98
Paper—						
Bags	cwt.	620	..	571	..	571
Butter	"	..	9	..	20	20
Printing	"	94	189	122	245	367
Hangings	pieces	..	40	..	2	2
Wrapping	cwt.	578	240	473	287	760
Writing	"	..	25	..	83	83
Unenumerated	"	..	5	..	10	10
Pearl barley	"	181	..	95	..	95
Perfumery—						
Perfumed spirits	galls.	..	33	..	80	80
Unenumerated	..	..	..	..	83	83
Phormium	tons	15,906	..	332,182	..	332,182
Tow	"	458	..	1,620	..	1,620
Photographic goods	..	..	..	13	243	256
Cameras	..	..	..	..	30	30
Pickles	galls.	..	581	..	108	108
Pictures, paintings, drawings, engravings, and photographs	..	..	..	1,069	851	1,920
Pitch	cwt.	70	6	12	7	19
Plants, shrubs, &c.	..	..	..	407	4	411
Platedware	..	..	..	..	1,533	1,533
Pollard and sharps	tons	1,034	..	3,743	..	3,743
Portmanteaux	..	..	..	..	58	58
Potatoes	tons	13,422	..	25,134	..	25,134
Printing materials	..	..	..	11	87	98
Provisions n.o.e.	..	..	..	564	424	988
Pumps	..	..	..	283	280	563
Rags	cwt.	494	..	387	..	387
Rice	"	..	2,988	..	2,303	2,303
Rugs	..	..	..	3,403	39	3,442
Saddlery and harness	..	..	..	1,267	154	1,421

DETAILS OF ALL EXPORTS, 1900—*continued.*

Articles exported.		Quantities.		Value in Sterling.		
		Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
				£	£	£
Saltpetre	cwt.	..	1	..	1	1
Sashes, window	pairs	1,024	..	685	..	685
Sauces	galls.	61	141	13	79	92
Sausage-skins	cwt.	9,391	234	43,158	1,086	44,244
Seeds—						
Grass and clover	"	62,791	50	93,006	102	93,108
Unenumerated	..	..	..	783	869	1,652
Ship-chandlery, n.o.e.	..	..	..	1,008	1,405	2,413
Silk piece-goods	..	..	..	..	508	508
Silver	oz.	326,457	..	38,879	..	38,879
Skins—						
Calf and other	No.	6,065	..	668	..	668
Rabbit	No. = lb.	5,690,893 793,724	..	41,689	..	41,689
Sheep, with wool	No. =lb.	267,545 1,862,602	..	41,587	..	41,587
Sheep, without wool	No. =lb.	4,401,885 9,953,297	..	237,804	..	237,804
Soap—						
Common	cwt.	3,936	..	2,834	..	2,834
Extract of	..	..	..	..	21	21
Unenumerated	lb.	40	3,246	2	163	165
Specie—						
Gold	..	..	..	..	9,700	9,700
Silver	..	..	..	..	13,193	13,193
Copper	..	..	..	..	10	10
Specimens, illustrative of natural science	..	..	..	907	100	1,007
Spices—						
Ground	lb.	40	..	2	..	2
Unground	"	..	20,697	..	6,622	6,622
Spirits—						
Bitters, cordials, and liqueurs	galls.	..	56	..	44	44
Brandy	"	..	1,314	..	661	661
Geneva and gin	"	..	910	..	262	262
Rum	"	..	508	..	106	106
Whiskey	"	..	9,041	..	3,641	3,641
Starch	lb.	..	1,650	..	30	30
Stationery	..	..	..	1,421	832	2,253
Stone—						
Building	tons	111	..	137	..	137
Wrought	"	..	..	84	4	88
Unwrought	"	166	..	315	..	315
Greenstone	cwt.	60	..	336	..	336
Pumice	tons	1,421	..	4,687	..	4,687
Sugar—						
Refined	lb.	555,147	191,076	4,623	1,455	6,078

DETAILS OF ALL EXPORTS, 1900—*continued.*

Articles exported.	Quantities.		Value in Sterling.		
	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
Sugar—*continued.*			£	£	£
Glucose .. .. cwt.	..	57	..	40	40
Molasses and treacle "	36	81	30	50	80
Tallow .. .. tons	17,275	..	337,321	..	337,321
Mutton stock, and oleomargarine .. .. tons	1,076	..	30,584	..	30,584
Oil .. .. "	38	..	568	..	568
Tarpaulins and tents	..	..	11	29	40
Tanning materials—					
Bark .. .. tons	46	..	249	..	249
Tar	..	..	..	4	4
Tea .. .. .. lb.	..	235,844	..	11,334	11,334
Textile piece-goods, other than silk, cotton, linen, or woollen	..	..	49	183	232
Articles made up from, other than apparel	..	..	42	586	628
Timber—					
Logs, hewn .. sup. ft.	3,197,083	..	8,290	..	8,290
Sawn, undressed .. sup. ft.	51,119,799	4,362	204,223	108	204,331
" dressed .. "	3,200,203	..	19,661	..	19,661
Staves .. .. No.	49,700	..	300	..	300
Unenumerated	..	..	936	4	940
Tin, sheet .. .. cwt.	..	342	..	360	360
Tinware	..	..	65	74	139
Tobacco—					
Manufactured .. lb.	..	54,044	..	4,329	4,329
Cigars .. .. "	..	4,081	..	1,099	1,099
Cigarettes .. .. "	..	2,078	..	718	718
Tobacco-pipes and cases, &c. ..	..	..	..	9	9
Tools, unenumerated	..	..	13	581	594
Turpentine .. .. gals.	..	8	..	1	1
Twine	..	..	4	218	222
Binder .. .. cwt.	1,766	..	3,433	..	3,433
Nets and netting	..	..	3	..	3
Umbrellas and parasols ..	..	..	..	88	88
Materials for	..	..	..	54	54
Varnish and gold size .. gals.	..	735	..	363	363
Vegetables	..	..	159	19	178
Vinegar .. .. gals.	..	24	..	2	2
Watches .. .. No.	..	471	..	546	546
Wax, parafin .. .. lb.	..	122,060	..	2,118	2,118
Whalebone .. .. cwt.	59	..	737	..	737
Wine—					
Australian .. .. gals.	..	154	..	71	71
Sparkling .. .. "	..	311	..	576	576
Other kinds .. "	42	1,176	23	562	585
Woodenware	..	..	965	1,673	2,638
Wool—					
Greasy .. .. lb.	110,622,101	..	3,427,167	..	3,427,167

DETAILS OF ALL EXPORTS, 1900—*continued.*

Articles exported.			Quantities.		Value in Sterling.		
			Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Produce and Manufactures of the Colony.	British, Foreign, and other Colonial Produce and Manufactures.	Total.
Wool—*continued.*					£	£	£
Scoured	..	lb.	15,866,208	..	796,714	..	796,714
Sliped	..	"	12,421,295	..	449,317	..	449,317
Washed	..	"	1,796,882	..	75,998	..	75,998
Woollen piece-goods	..	..	..	..	8,031	1,119	9,150
" blankets	..	pairs	10,440	..	1,089	..	1,089
Yarns	..	..	..	..	5	155	160
Zinc—							
Spelter	..	cwt.	573	546	380	558	938
Plain sheet	..	"	..	2	..	4	4
Goods, miscellaneous—							
Manufactured	..	..	..	..	587	172	759
Unmanufactured	..	..	..	..	1,654	339	1,993
Silver-sand	..	tons	41	..	101	..	101
Parcels Post	..	..	..	..	11,800	..	11,800

Total Value of Trade.

The value of the total trade of New Zealand advanced from £13,431,804 in the year 1886 to £23,892,257 in 1900. But of these amounts some portion was coin. Excluding the specie, the figures for 1886 are £12,853,736, and for 1900, £23,430,584.

Year.	Total Trade.	Imports.	Exports.	Imports (excluding Specie).	Exports (excluding Specie).	Excess of Exports over Imports (excluding Specie).
	£	£	£	£	£	£
1886	13,431,804	6,759,013	6,672,791	6,319,223	6,534,513	215,290
1887	13,111,684	6,245,515	6,866,169	6,064,281	6,680,772	616,491
1888	13,709,225	5,941,900	7,767,325	5,430,050	7,403,206	1,972,156
1889	15,650,727	6,308,863	9,341,864	5,980,583	9,183,954	3,203,371
1890	16,072,245	6,260,525	9,811,720	5,928,895	9,569,316	3,640,421
1891	16,070,246	6,503,849	9,566,397	6,431,101	9,560,859	3,129,758
1892	16,477,907	6,943,056	9,534,851	6,742,544	9,490,920	2,748,376
1893	15,896,879	6,911,515	8,985,364	6,494,279	8,680,845	2,186,566
1894	16,019,067	6,788,020	9,231,047	5,990,177	9,221,550	3,231,373
1895	14,950,353	6,400,129	8,550,224	6,115,953	8,518,119	2,402,166
1896	16,458,425	7,137,320	9,321,105	7,035,379	9,299,907	2,264,528
1897	18,072,216	8,055,223	10,016,993	7,994,201	9,741,222	1,747,021
1898	18,748,555	8,230,600	10,517,955	8,211,409	10,449,838	2,238,429
1899	20,677,968	8,739,633	11,938,335	8,613,656	11,923,422	3,309,766
1900	23,892,257	10,646,096	13,246,161	10,207,326	13,223,258	3,015,932

The trade for these years has been selected for exhibition in tabular form because during each of the series there was an excess of exports over imports, whereas previously the reverse obtained, and the colony was purchasing to an extent not covered by the value of the export. During the last fifteen years the excess of exports over imports, excluding money sent to and from the colony, amounted to a total sum of £35,921,644.

How different the foregoing conditions were from those previously obtaining will be seen by observing the balance of trade for the years 1881 to 1885 inclusive :—

Year.	Excess of Imports over Exports. £	Year.	Excess of Imports. over Exports. £
1881	1,406,898	1884	235,981
1882	1,948,485	1885	539,239
1883	761,938		

The gradually declining excess of imports turned in 1886 and 1887 to a small excess of exports, but subsequently the excess of exports was very great, and attained the sum of £3,640,421 in the year 1890.

Again considering the results for the fifteen years, 1886–1900, during which the balance was in favour of the exports, the external trade is shown for each year per head of population, the calculations being made exclusive as well as inclusive of specie, for the purpose of arriving at exact conclusions as regard trade in goods. In the year 1894 the imported money amounted to a sum of £797,843, making a substantial difference in the rates.

Excluding specie, the trade per head of population increased from £22 1s. 7d., in 1886, to £30 13s. 8d. in 1900: imports from £10 17s. 1d. to £13 7s. 4d., and exports from £11 4s. 6d. to £17 6s. 4d.

Year.	Including Specie.			Excluding Specie.		
	Total Trade per Head of Mean Population (excluding Maoris).	Imports per Head of Mean Population (excluding Maoris).	Exports per Head of Mean Population (excluding Maoris).	Total Trade per Head of Mean Population (excluding Maoris).	Imports per Head of Mean Population (excluding Maoris).	Exports per Head of Mean Population (excluding Maoris).
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1886	23 1 5	11 12 2	11 9 3	22 1 7	10 17 1	11 4 6
1887	21 19 8	10 9 5	11 10 3	21 7 5	10 3 4	11 4 1
1888	22 12 11	9 16 4	12 16 7	21 4 0	8 19 5	12 4 7
1889	25 9 11	10 5 6	15 4 5	24 15 9	9 15 6	15 0 3
1890	25 13 10	10 0 2	15 13 8	24 19 4	9 11 0	15 8 4
1891	25 10 4	10 6 6	15 3 10	25 7 10	10 4 3	15 3 7
1892	25 13 2	10 16 3	14 16 11	25 5 6	10 9 11	14 15 7
1893	24 0 9	10 9 0	13 11 9	22 18 11	9 16 5	13 2 6
1894	23 11 9	9 19 11	13 11 10	22 7 11	8 16 5	13 11 6
1895	21 11 10	9 4 10	12 7 0	21 2 8	8 16 8	12 6 0
1896	23 5 8	10 1 11	13 3 9	23 2 2	9 19 1	13 3 1
1897	25 0 11	11 3 3	13 17 8	24 11 7	11 1 7	13 10 0
1898	25 9 3	11 3 7	14 5 8	25 6 11	11 3 1	14 3 10
1899	27 11 5	11 13 1	15 18 4	27 7 8	11 9 8	15 18 0
1900	31 5 9	13 18 10	17 6 11	30 13 8	13 7 4	17 6 4

The highest record of trade (excluding specie) was that for 1874, when the rate per head was £41 4s. 5d., the imports, in consequence of the large expenditure of borrowed money, amounting at that time to £24 17s. per head, against £13 7s. 4d. in 1900.

It has been customary to leave out the Maoris in estimating the sum per head, for their industries and necessities swell the volume of trade in comparatively so slight a measure that the amount per head of European population can be more truly ascertained by omitting them altogether.

Trade with different Countries or Colonies.

The trade with the United Kingdom in 1900 amounted to £16,763,826, comprising 70·16 per cent. of the total.

With the Australian Colonies and Tasmania, trade was done during 1900 to the value of £3,635,560; of which New South Wales claimed £2,245,362, and Victoria £1,066,244, made up as follows:—

EXPORTS FROM NEW ZEALAND.

	£
To New South Wales, 1900	1,192,570
„ Victoria, 1900	514,231

EXPORTS TO NEW ZEALAND.

	£
From New South Wales, 1900	1,052,792
„ Victoria, 1900	552,013

The latter amounts, in each case, represent the declared values of the imports into New Zealand from the colonies mentioned, not their export value as given in the New South Wales and Victorian returns.

Included in the exports to New Zealand from New South Wales is coal to the quantity of 124,011 tons, valued at £120,379.

The trade with Fiji and the other Pacific Islands (including Norfolk Island) increased from £451,393 in 1899 to £622,056 in 1900.

Both imports from and exports to the United States in 1900 show an increase when compared with the previous year's figures.

Of the exports to the United States in 1900 the values of the principal New Zealand products were: Coal, £1,589; kauri-gum, £377,992; hides, £7,948; sheepskins, £15,079; rabbit-skins, £3,468; sausage-skins, £19,753; wool, £1,824; and phormium, £25,515.

The table on the following page shows the value of the total trade with the United States for each of the past ten years, 1891 to 1900 inclusive, during which period the trade has increased considerably.

TRADE WITH THE UNITED STATES.

Year.	Imports from		Exports to		Total Trade.
	Atlantic Ports.	Pacific Ports.	Atlantic Ports.	Pacific Ports.	
	£	£	£	£	£
1891	317,913	43,882	395,386	119,822	877,003
1892	344,799	36,828	459,314	61,483	902,424
1893	345,743	33,635	430,842	65,706	875,926
1894	359,196	35,495	230,829	56,367	681,887
1895	351,823	42,410	298,536	18,103	710,872
1896	419,689	73,151	263,564	63,025	819,429
1897	521,939	106,105	252,013	123,083	1,003,140
1898	700,555	99,856	337,059	286,074	1,423,544
1899	687,906	87,403	387,614	45,885	1,208,808
1900	958,286	103,587	424,314	34,482	1,520,669

The development in the decennial period is at the rate of 73·39 per cent., or an increase in value of £643,666.

The trade with India and Ceylon reached a total of £391,301, against £336,110 in 1899. The imports—tea, rice, castor-oil, wool-packs, &c.—were reckoned at £381,885, leaving a balance of only £9,416 for exports.

Trade of the Australasian Colonies.

The following table gives the value of the imports and exports of the Australasian Colonies for the year 1899.—

Colony.	Total Value of		Excess of Exports over Imports.
	Imports.	Exports.	
	£	£	£
Queensland	6,764,097	11,942,858	5,178,761
New South Wales	25,594,315	28,445,466	2,851,151
Victoria	17,952,894	18,567,780	614,886
South Australia	6,884,358	8,388,396	1,504,038
Ditto, Northern Territory	131,879	158,650	26,771
Western Australia	4,473,532	6,985,642	2,512,110
Tasmania	1,769,324	2,577,475	808,151
New Zealand	8,739,633	11,938,335	3,198,702

In the preceding table is given the total trade inwards and outwards of each colony, counting twice over the value of goods produced in one colony and carried thence into another, and reckoning the same goods three times where they are imported from without into one colony and re-exported thence in the same year into another colony. But, in order to form a just idea of the trade of the Australasian Colonies as a whole, it is necessary to eliminate the inter-

colonial traffic altogether. From the following table the value of imports and exports exchanged between the various colonies has accordingly been excluded :—

EXTERNAL TRADE OF AUSTRALASIA.

Year.	Total Trade.	Imports.	Exports.	Excess of Imports.	Excess of Exports.
	£	£	£	£	£
1885 ..	72,220,444	41,136,038	31,084,406	10,051,632	..
1890 ..	75,143,818	38,451,160	36,692,658	1,758,502	..
1891 ..	84,565,778	41,325,033	43,240,745	..	1,915,712
1892 ..	75,325,933	34,529,501	40,796,432	..	6,266,931
1893 ..	67,788,738	27,925,990	39,862,748	..	11,936,758
1894 ..	65,192,202	26,063,630	39,128,572	..	13,064,942
1895 ..	67,624,317	27,425,725	40,198,592	..	12,772,867
1896 ..	74,511,262	34,420,596	40,090,666	..	5,670,070
1897 ..	83,569,568	37,862,741	45,706,827	..	7,844,086
1898 ..	85,600,442	37,310,583	48,289,859	..	10,979,276
1899 ..	97,637,194	39,990,123	57,647,071	..	17,656,948

It will be observed that in the year 1885 the excess of imports over exports for Australasia amounted to no less a sum than £10,051,632, and that five years later the excess of imports had fallen to £1,758,502. In 1891 the position was completely reversed, the exports exceeding the imports by £1,915,712. This excess increased to £6,266,931 in the following year (1892), and to £13,064,942 in 1894, but decreased to £12,772,867 in 1895, to £5,670,070 in 1896. It was £7,844,086 in 1897, and £10,979,276 in 1898, but in 1899 the excess of exports over imports amounted to £17,656,948.

The trade per head of the population in each of the colonies in 1899 was :—

TRADE PER HEAD OF THE POPULATION IN 1899.

Colony.	Mean Population.	Imports.	Exports.	Total Trade.
		£ s. d.	£ s. d.	£ s. d.
Queensland	508,864	13 5 10	23 9 5	36 15 3
New South Wales	1,345,245	19 0 6	21 2 11	40 3 5
Victoria	1,160,700	15 9 4	15 19 11	31 9 3
South Australia	363,026	18 19 3	23 2 2	42 1 5
Ditto, Northern Territory ..	4,935	26 14 6	32 2 11	58 17 5
Western Australia	168,879	26 9 9	41 7 4	67 17 1
Tasmania	179,924	9 16 8	14 6 6	24 3 2
New Zealand	749,984	11 13 1	15 18 4	27 11 5

But the values of the exports of the Australian Colonies, more especially New South Wales, Victoria, and South Australia, are largely increased by the inclusion of articles the produce or manufacture of other colonies and countries.

The value of home productions or manufactures exported from each colony in 1899, and the rate per head of mean population, were as follow:—

Colony.	Home Produce exported. £	Per Head of Population. £ s. d.
Queensland	11,697,139 ..	22 19 9
New South Wales	19,221,854 ..	14 5 9
Victoria	14,038,600 ..	12 1 11
South Australia	3,945,045 ..	10 17 4
Ditto, Northern Territory ..	156,036 ..	31 12 4
Western Australia	6,793,946 ..	40 4 7
Tasmania	2,557,315 ..	14 4 3
New Zealand	11,799,740 ..	15 14 8

The next table sets forth the amount of the trade of each of the above-named colonies with the United Kingdom in 1899:—

Colony.	Imports from the United Kingdom.	Exports to the United Kingdom.	Total Trade with the United Kingdom.
	£	£	£
Queensland	2,905,437	4,272,952	7,178,389
New South Wales	8,211,551	8,992,480	17,203,831
Victoria	5,990,027	5,648,150	11,638,177
South Australia	2,040,430	2,805,787	4,846,217
Ditto, Northern Territory	33,214	31,484	64,698
Western Australia	1,550,029	3,774,247	5,324,276
Tasmania	501,120	1,039,640	1,540,760
New Zealand	5,526,645	9,427,515	14,954,160

The statement appended shows the relative importance of the Australasian Colonies as a market for the productions of the United Kingdom:—

EXPORTS OF HOME PRODUCTIONS FROM THE UNITED KINGDOM, IN 1899, TO—

	£
British India and Ceylon	32,701,866
Germany	25,996,127
Australasia	22,500,287
United States	18,119,380
France	15,283,079
Russia	11,720,333
Cape of Good Hope and Natal	11,370,125
Belgium	9,836,165
Holland	9,425,974
Sweden and Norway	8,004,972
Japan	7,909,158
China	7,040,460

The exports to other countries did not amount to £7,000,000 in any one case.

The Australasian Colonies as a whole, with a population of about 4,500,000, thus take the third place in importance as consumers of British produce, the exports thereto being more than two-thirds the value of similar exports to British India, with its 290,000,000 inhabitants.

SECTION III.—MANUFACTORIES AND WORKS.

Information respecting manufactories and works is only collected once in every five years, at the time of the census. The figures which have been published relating to the year 1896 will be found fully detailed in the Year-book of 1897, and more shortly in that for 1899, but, owing to changed conditions and recent developments, it is not considered advisable to republish them. Another census has now been taken, and fresh information will be compiled showing the present magnitude of the industries of the colony, both as to number and value of production.

SECTION IV.—LAW AND CRIME.

Civil Cases.

Sittings of the Supreme Court are held for trial of civil cases at Auckland, Gisborne, New Plymouth, Napier, Wellington, and Wanganui, in the North Island; and at Blenheim, Nelson, Hokitika, Christchurch, Timaru, Oamaru, Dunedin, and Invercargill, in the Middle Island.

The number of writs of summons issued in the Supreme Court in 1899 was 511, against 426 in 1898, 460 in 1897, 529 in 1896, and 511 in 1895. The number of civil cases tried increased from 131 in 1898 to 157 in 1899. Of these last, 46 were tried before common juries, 17 by special jury, and 94 by Judge without jury. The total of amounts for which judgments were recorded in 1899 was £20,410. There were 39 writs of execution issued during the year.

Seventy-one cases were commenced at seventeen District Courts in 1899. Twelve of these cases were tried before juries, and 29 before a Judge only, making a total of 41 cases tried. Twenty-five cases lapsed or were discontinued, and five remained pending. The total of amounts sued for was £10,124, and judgments were recorded for £3,151. Before the Magistrates' Courts 23,095 cases were tried, against 22,752 in 1898; the aggregate sum sued for being £294,644, and the total for which judgment was given £174,114.

Court of Appeal.

No Crown (criminal) cases were reserved from the superior Courts to be brought before the Court of Appeal in 1899. There were appeals from 12 civil cases, of which 5 were allowed and 7 dismissed. Judgments were given on 13 other cases removed to the Court of Appeal.

Bankruptcy.

The petitions in bankruptcy during 1899 numbered 389, of which 357 were made by debtors and 32 by creditors. This number is 18 fewer than the number of petitions for the preceding year.

Of the bankruptcies in 1899: in 19 cases the liabilities were under £50; in 86, from £50 to £100; in 140, from £100 to £250; in 58, from £250 to £500; in 42, from £500 to £1,000; in 28, from £1,000 to £2,000; in 11, from £2,000 to £5,000; in 3, £5,000 and upwards; and in 2 cases no statements were filed.

The following gives the number of petitions, the total amount of the unsecured assets, the amount of debts proved, and the amount paid in dividends and preferential claims for the years 1895, 1896, 1897, 1898, and 1899:—

Year.	No. of Petitions in Bankruptcy.	Debtors' Statements of Assets, excluding Amounts secured to Creditors.	Amounts realised by Official Assignees.	Amount of Debts proved.	Amounts paid in Dividends and Preferential Claims.
		£	£	£	£
1895 ..	485	133,603	88,684	239,562	70,018
1896 ..	412	115,455	71,712	256,870	37,492
1897 ..	415	73,466	40,942	133,344	45,015
1898 ..	407	90,068	45,474	285,154	30,994
1899 ..	389	59,434	34,268	158,931	30,084

A special article on the present bankruptcy law of New Zealand was printed in the Year-book of 1894. Reference is made in it to a mode of private assignment which has come into such frequent use as to prevent conclusions being drawn from a comparison of the figures above given.

Divorce.

In 1898 the Legislature of New Zealand passed a Divorce Act, and the signification of Her Majesty's assent thereto was duly notified by His Excellency the Governor in a Proclamation dated the 1st April, 1899. (*Gazette* No. 32, of 13th April, 1899.)

The new Act places persons of either sex practically on an equality as regards petitions for dissolution of marriage; the same

grounds, in substance, for a decree of divorce applying to man or woman.

Besides this important alteration of the law, the grounds for divorce are extended as under :—

1. Adultery, on either side.
2. Wilful desertion continuously during five years or more.
3. Habitual drunkenness on the part of husband, along with failing to support wife; or drunkenness and neglect, with unfitness to discharge household duties on the part of the wife.
4. Conviction, with sentence of imprisonment or penal servitude for seven years or upwards, for attempting to take life of petitioner.

Every decree for dissolution of marriage is in the first instance to be a decree *nisi*, not to be made absolute till after the expiration of such time, being not less than three months from the pronouncing thereof, as the Court shall by order from time to time direct.

The petitioner need not necessarily move to make absolute any decree *nisi* that may be pronounced.

A decree for a judicial separation may be obtained either by the husband or wife on the ground of adultery, or of cruelty, or of desertion without cause for a period of two years.

The petitions in 1899 under "The Divorce and Matrimonial Causes Act, 1867," were 113 in number, being 49 in excess of those for 1898: 112 were for dissolution of marriage, and 1 for judicial separation; 46 decrees for dissolution of marriage were granted. The proceedings under the Act for the years 1895, 1896, 1897, 1898, and 1899 were as follows :—

Year.	Petitions for		Decrees for	
	Dissolution of Marriage.	Judicial Separation.	Dissolution of Marriage.	Judicial Separation.
1895	30	6	18	5
1896	55	6	36	2
1897	48	10	33	1
1898	51	13	32	2
1899	112	1	46	16

The new Act has evidently operated in the direction of increasing largely (but probably in the main temporarily) the number of petitions and decrees for dissolution of marriage or judicial separation.

The proportion of petitions and decrees for dissolution of marriage to the number of marriages was up till 1898 higher in New Zealand

than in England and Wales, but lower than in New South Wales or Victoria. The full effect of the operation of the new law in New Zealand has now, however, to be experienced.

As early as 1889 an Act was passed in Victoria to allow of divorces being granted for wilful desertion, habitual drunkenness with cruelty or neglect, imprisonment under certain circumstances of either party, and adultery on the part of the husband. This multiplication of the causes for divorce has largely increased the proportion of decrees in that colony.

An Act of a similar tenor was passed in New South Wales in 1892, and brought into working in August of that year, under which, and an amending Act of 1893, in addition to adultery since marriage on the part of the wife, and adultery and cruelty on the part of the husband, petitions for divorce can now be granted in that colony on any of the following grounds:—

Husband *v.* wife: Desertion for not less than three years; habitual drunkenness for a similar period; refusing to obey an order for restitution of conjugal rights; being imprisoned under a sentence of three years or upwards; attempt to murder or inflict grievous bodily harm, or repeated assaults on him within one year previously.

Wife *v.* husband: Adultery, provided that at the time of the institution of the suit the husband is domiciled in New South Wales; desertion for not less than three years; habitual drunkenness for the same period; refusing to obey an order for restitution of conjugal rights; being imprisoned for three years or upwards, or having within five years undergone various sentences amounting in all to not less than three years; attempt to murder, or assault with intent to inflict grievous bodily harm, or repeated assaults within one year previously.

To entitle either party to seek relief on these grounds, he or she must have been domiciled in the colony at the time of instituting the suit for three years or upwards, and should not have resorted to the colony for the purpose of the suit. When a wife seeks for a decree on the ground of three years' desertion, if she was domiciled in New South Wales when the desertion commenced, she shall not be deemed to have lost her domicile by reason of her husband having thereafter acquired a foreign domicile.

The divorces and separations in New South Wales and Victoria since the divorce law has been altered in the direction of increasing the grounds for decrees are as under. With these are given the figures for New Zealand under the old law up to 1898, and according to the new Act for 1899. The figures for New South Wales tend to show that on altering the law there was a large accumulation of cases to get rid of, which increased the number of decrees to a degree which was not subsequently maintained.

Year.	New South Wales.		Victoria.		New Zealand.	
	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.
1893 ..	306	9 ..	85	7 ..	25	1
1894 ..	313	14 ..	81	2 ..	20	4
1895 ..	301	11 ..	85	.. ..	18	5
1896 ..	234	8 ..	106	2 ..	36	2
1897 ..	246	13 ..	117	.. ..	33	1
1898 ..	247	17 ..	87	.. ..	32	2
1899* ..	..	.. ..	..	.. ..	46	16

* Act of 1898 in force.

CRIMINAL CASES.

Charges before Magistrates.

The number of charges heard before the Magistrates' Courts in 1899 was 23,095. Repeated charges against the same person are counted as distinct. Of the charges in 1899, 421 were against persons of the aboriginal native race, a decrease of 97 on the number for the previous year.

If the Maoris be excluded, the number of charges in 1899 is found to have been 22,674, an increase of 440 upon the number for 1898; and the proportion per 1,000 of population was 30·23, against 30·19 in 1898.

The figures, both numerical and proportional, covering a period of eighteen years are subjoined:—

CHARGES BEFORE MAGISTRATES.

Year.	Number.	Proportion per 1,000 of Mean Population.	Year.	Number.	Proportion per 1,000 of Mean Population
1882	22,108	43·41	1894	17,353	25·55
1885	22,709	39·61	1897	19,949	27·65
1888	18,829	30·88	1898	22,234	30·19
1891	17,189	27·29	1899	22,674	30·23

The general results shown in the next table are borne out in a most satisfactory manner by the statistics relating to prisoners in gaol (see *post*), which also show a marked decrease in crime during the above period.

Summary Convictions, and Convictions in Superior Courts.

The summary convictions in 1899 numbered 17,586, including 300 Maoris. 710 persons, 29 of whom were Maoris, were committed for trial at the Supreme and District Courts, a decrease of 2 on the number committed in 1898.

"The Justices of the Peace Act, 1882," provides that sundry indictable offences may with the consent of the accused be summarily dealt with by Magistrates. The increasing use of this provision may have affected the number of convictions in the higher Courts shown in the table on the next page.

A comparison of the number of persons in New Zealand summarily convicted during the years 1889, 1891, 1894, 1897, and 1899 shows an increase in the proportion of these convictions per 1,000 of the population on the total, but a decrease in regard to offences against the person. Dealing with the convictions in the superior Courts for all offences, the proportion per 1,000 of population is higher for 1899 than that for 1889, and similarly for offences against the person and against property. For other offences there is a fall in the proportion. The figures given exclude the Maoris:—

Years.	Summary Convictions. Number.	Summary Convictions. Proportion per 1,000 of Mean Population.	Convictions in Superior Courts. Number.	Convictions in Superior Courts. Proportion per 1,000 of Mean Population
1889—				
Offences against the person	716	1·17	30	0·05
Offences against property ..	1,377	2·24	152	0·25
Other offences	11,768	19·16	43	0·07
Totals	13,861	22·57	225	0·37
1891—				
Offences against the person	751	1·19	31	0·05
Offences against property ..	1,312	2·08	141	0·23
Other offences	10,988	17·45	42	0·07
Totals	13,051	20·72	214	0·35
1894—				
Offences against the person	724	1·07	36	0·05
Offences against property ..	1,284	1·89	199	0·29
Other offences	10,605	15·61	65	0·10
Totals	12,613	18·57	300	0·44
1897—				
Offences against the person	781	1·08	49	0·07
Offences against property ..	1,412	1·96	240	0·33
Other offences	12,682	17·57	14	0·02
Totals	14,875	20·61	303	0·42
1899—				
Offences against the person	678	0·90	79	0·11
Offences against property ..	1,549	2·07	273	0·36
Other offences	15,059	20·08	24	0·03
Totals	17,286	23·05	376	0·50

Including 7 Maoris, the convictions in the superior Courts numbered 383 (persons). Particulars of sentences for these higher Courts, and of the punishments consequent on summary convictions in the lower Courts, are appended in two tables:—

TABLE showing the Sentences of Criminals Tried and Convicted in the Supreme and District Courts during Five Years.

Punishments.	1895.	1896.	1897.	1898	1899.
Death	2	..	2	3	..
Imprisonment with or without hard labour..	275	253	235	286	306
Fined	..	1	3	19	2
Imprisonment with whipping	2	..	..	2	2
Released under "The First Offenders' Probation Act, 1886"	58	43	63	50	61
Held to bail, or awaiting pleasure of Court ..	22	13	12	21	12
Sent to lunatic asylum	..	1	1	3	..
Sent to industrial school	..	..	..	2	..
Totals	*359	†311	‡316	§386	‖383

* Including 15 Maoris. † Including 19 Maoris. ‡ Including 12 Maoris. § Including 35 Maoris. ‖ Including 7 Maoris.

TABLE showing the Punishments inflicted consequent on Summary Convictions during Five Years.

Punishments.	1895.	1896.	1897.	1898.	1899.
Fine	6,260	6,425	6,821	8,149	8,229
Fine and imprisonment	..	..	5	..	..
Fine and order made	2	8	..	..	..
Fine and recognisance	16	4	..	..	..
Imprisonment in lieu of fine ..	1,554	1,552	1,409	1,410	1,762
Imprisonment and order made ..	2	..	..	..	..
Imprisonment and whipping ..	1	..	1	..	..
Peremptory imprisonment ..	1,557	1,534	1,579	1,616	1,683
Recognisance	119	..	123	111	118
Recognisance and order made ..	1	..	..	..	..
Whipping	21	7	28	18	28
Other	3,534	4,619	4,909	5,338	5,466
Totals	13,067	14,149	14,875	16,642	17,286

N.B.—Maoris have been excluded from this table.

Drunkenness.

During the five years, 1895 to 1899 inclusive, the consumption of beer in the colony per inhabitant would seem to have increased, the proportion having been 6·9 gallons in the earlier year, against 8·1 gallons in the later one. Excluding the Maoris, the same result is found to obtain, the figures being 7·4 for the year 1895 and 8·5 for 1899. Wine and spirits show a small increase in the consumption per head of population. The following calculations are made to show the results, including and excluding Maoris :—

CONSUMPTION OF BEER, WINE, AND SPIRITS PER HEAD OF POPULATION (INCLUDING AND EXCLUDING MAORIS).

	Including Maoris.			Excluding Maoris.		
	Beer. Gal.	Wine. Gal.	Spirits. Gal.	Beer. Gal.	Wine. Gal.	Spirits. Gal.
1895	6·996	0·127	0·593	7·421	0·135	0·629
1896	7·453	0·133	0·605	7·873	0·141	0·639
1897	7·790	0·138	0·628	8·220	0·146	0·663
1898	7·995	0·139	0·634	8·427	0·146	0·668
1899	8·150	0·141	0·653	8·583	0·148	0·687

The actual quantities of beer, wine, and spirits used in the colony were, for the five years :—

	Beer for Consumption. Gals.	Wine for Consumption. Gals.	Spirits for Consumption. Gals.
1895 ..	5,138,170	93,138	435,431
1896 ..	5,565,040	99,473	451,679
1897 ..	5,931,550	105,060	478,136
1898 ..	6,204,700	107,595	491,846
1899 ..	6,437,140	111,049	515,384

Excluding Maoris, the proportion of convictions for drunkenness per 1,000 of population was 8·50 in the year 1889 and 9·18 in 1890, diminishing to 6·60 in 1895, 6·82 in 1896, 7·01 in 1897, and 7·41 in 1898, and coming back to 8·26 in 1899. The number of convictions to which the proportions for 1895, 1896, 1897, 1898, and 1899 relate were as under :—

Year.	Number.	Year.	Number.
1895	4,568	1898	5,458
1896	4,822	1899	6,194
1897	5,060		

The totals of charges for drunkenness for the same years were :—

Year.	Number.	Year.	Number.
1895	4,676	1898	5,559
1896	4,916	1899	6,279
1897	5,156		

Among the New-Zealand-born population of European descent there is evidence of less drunkenness than among persons who have come to the colony from abroad. At the census of 1896, out of the total population of New Zealand over 15 years of age, not less than 43·71 per cent. were found to have been born here; while the proportion of the convictions for drunkenness of New-Zealand-born Europeans to the total convictions was in that year less than 15 per cent.

The prison statistics show for some years back the number of distinct prisoners received into gaol after being convicted of drunkenness. The figures for the years 1889–99 are as follow (readmissions of the same person not counted) :—

DISTINCT PRISONERS CONVICTED OF DRUNKENNESS RECEIVED INTO GAOL.

Year.	Number.	Year.	Number.
1889	802	1895	469
1890	808	1896	515
1891	694	1897	486
1892	638	1898	520
1893	619	1899	610
1894	457		

Here the decrease proceeds rapidly and uniformly from year to year until the year 1895, after which the figures rise somewhat. But conclusions cannot be drawn so safely from these prisons statistics as from the convictions for drunkenness previously stated, which showed numbers rising from year to year, but along with the increase in the population of the colony.

In Australia the consumption per head of alcoholic liquors is greater than it is here. The average for three years, according to Mr. Coghlan, is given in the "Seven Colonies of Australasia," and quoted below :—

	Spirits. Gal. Per Head.	Wine. Gal. Per Head.	Beer. Gal. Per Head.
New South Wales	0·73	0·66	9·58
Victoria	0·72	1·94	11·76
Queensland	0·98	0·55	11·58
South Australia	0·39	2·26	8·95
Western Australia	1·85	1·07	23·84
Tasmania	0·39	0·09	7·33
New Zealand	0·65	0·14	8·15

In each of these colonies, with the exception of Tasmania and South Australia, charges for drunkenness are, in proportion to population, far more numerous than in New Zealand. The order of the colonies for the year 1898 in this respect is, to quote from the same authority, as under :—

CHARGES OF DRUNKENNESS IN PROPORTION TO POPULATION.

Western Australia	18·79 per 1,000
Queensland	15·28 "
New South Wales	14·67 "
Victoria	11·82 "
New Zealand	7·55 "

"The Inebriates Institutions Act, 1898."

Under this law, the Governor in Council may direct that any building or establishment which is the property of the Crown shall be an institution for inebriates; and he may appoint superintendents, with other officers.

Power is also given to make regulations for the management, supervision, and inspection of these institutions, any of which may be separated into two divisions, with different scales of accommodation, and fees to be paid by patients.

An inebriate may himself make application to a Judge or Magistrate for an order committing him to an institution. Or, if the husband, wife, or any relation or friend of any inebriate applies, the Judge or Magistrate may summon the inebriate to show cause why he should not be committed; when, if necessary, he may be compulsorily dealt with.

There are penalties for improper treatment of patients, and a patient is also liable if misconducting himself. It is also enacted that, during the continuance of an order, an escaped inebriate may be retaken.

Crime amongst Maoris.

The Native population of the colony has hitherto been regarded as stationary, and comparisons of the numbers of summary convictions by the higher and lower Courts are given. The number for 1897 is swelled by 108 persons convicted of trespass. The figures relating to the convictions by the superior Courts are small and fluctuating, the proportionately large increase in 1898 being caused by the inclusion of sixteen convicted of conspiring to prevent collection of taxes.

SUMMARY CONVICTIONS OF MAORIS.

Year.	Number.	Year.	Number.
1891	298	1896	332
1892	293	1897	450
1893	253	1898	349
1894	321	1899	300
1895	316		

CONVICTIONS OF MAORIS IN SUPERIOR COURTS.

Year.	Convictions.	Number of Persons convicted.
1889	10	10
1890	31	35
1891	7	7
1892	16	15
1893	13	12
1894	25	24
1895	17	15
1896	19	19
1897	16	12
1898	21	35
1899	8	7

Prisoners in Gaol.

The total number of prisoners received in the different gaols of the colony during the year 1899 was 3,774, including persons awaiting trial but not convicted within the year, and counting as distinct persons repeated admissions of the same person, as well as transfers from gaol to gaol of convicts undergoing sentence. In 1898 the number received was 3,462, so that the figures for 1899 show an increase of 312. Of 3,774 admissions for 1899, 62 were for debt, and 53 on account of lunacy; while 125 were Maoris imprisoned for various offences. If the debtors, lunatics, and Maoris be excluded, the number of persons received into gaol is reduced to 3,534, against 3,226 in 1898. In 1881, when the mean population was only 493,482 persons, the corresponding number of admissions was 4,207.

The number of persons in gaol (including Maoris) at the end of the year 1899 was not equal to that for 1889, notwithstanding the increase of population:—

PRISONERS IN GAOL (31ST DECEMBER).

Year.	Undergoing Sentence.	Debtors and Lunatics	On Remand and awaiting Trial.	Total.
1889	611	3	19	633
1891	494	4	36	534
1893	463	6	33	502
1895	531	5	46	582
1897	623	..	51	674
1899	508	..	58	566

Of the prisoners previously convicted received in 1899, 364 men and 34 women had been convicted once; 201 men and 25 women twice; 901 men and 395 women three or more times: making a total of 1,466 men and 454 women.

Besides the returns from the Prisons Department, a separate card for each admission is furnished for every gaol. Such cards as show convictions are arranged alphabetically according to name of prisoner, and where several are found referring to the same person, all are thrown out but one; then the number of cards retained equals the actual number of distinct convicted prisoners received in the various gaols during the year. In 1899 this number (excluding Maoris) was 2,125, an increase of 143 on the number in 1898. These figures do not include children committed to the industrial schools simply on the ground that they are neglected or destitute.

The following table shows the number of distinct persons (exclusive of Maoris) received into gaol after conviction during 1899, classified according to nature of offence, religion, birthplace, and age:—

DISTINCT CONVICTED PRISONERS RECEIVED INTO GAOL, 1899.

[NOTE.—In this table a prisoner convicted of more than one offence during the year is reckoned once only, under the heading of the principal offence—*e.g.*, a prisoner convicted three times of drunkenness, twice of vagrancy, and once of theft, is counted only once, under the heading "Theft." Debtors and lunatics received into gaol, and children committed to the industrial schools not convicted of any crime, are omitted.]

—	Offences against the Person.				Offences against Property.				Miscellaneous.						Totals.	
	Convicted on Indictment.		Summarily convicted.		Theft and Deceit.		Mischief.		Vagrancy.		Drunkenness.		Other Offences.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Religions—																
Church of England	32	2	61	3	262	7	12	1	75	42	171	38	190	2	803	95
Roman Catholic	13	4	42	3	120	12	14	1	54	37	183	55	122	4	548	116
Presbyterian	10	...	16	...	75	3	6	...	23	17	88	24	66	1	284	45
Wesleyan	5	...	5	1	41	1	4	...	9	5	14	...	18	...	96	7
Others	4	...	16	1	33	1	3	...	11	...	35	2	25	...	127	4
Totals	64	6	140	8	531	24	39	2	172	101	491	119	421	7	1,858	267
Birthplaces—																
England and Wales	22	...	33	1	141	1	9	1	53	24	151	21	148	1	556	49
Scotland	4	...	11	1	35	1	5	...	17	6	78	18	46	...	196	26
Ireland	7	2	28	2	63	5	9	1	38	26	127	53	57	5	329	94
New Zealand	20	1	41	3	221	13	11	...	32	34	58	17	111	1	494	69
Australian Colonies	3	3	8	1	25	1	2	...	12	8	20	6	19	...	89	19
Other British possessions	2	...	...	...	9	1	1	...	5	1	13	1	4	...	34	3
China	...	...	1	...	5	...	1	...	2	...	...	...	2	...	11	...
Other countries	6	...	19	...	32	2	1	...	13	2	44	3	34	...	149	7
Totals	64	6	140	8	531	24	39	2	172	101	491	119	421	7	1,858	267
Ages—																
Under 10 years	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10 and under 12 years	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12 and under 15 years	...	...	...	...	3	1	1	...	...	1	...	...	...	...	4	2
15 and under 20 years	6	...	6	...	73	3	2	...	3	4	7	2	19	1	118	10
20 and under 25 years	9	1	27	1	90	5	8	...	21	11	36	4	76	...	267	22
25 and under 30 years	11	...	37	1	92	1	6	...	13	14	49	11	79	...	287	27
30 and under 40 years	14	1	35	4	131	3	6	...	38	26	121	30	108	1	453	65
40 and under 50 years	15	4	17	2	81	6	10	1	43	29	132	40	89	3	387	85
50 and under 60 years	6	...	10	...	41	4	4	1	41	13	90	25	32	2	224	45
60 years and over	1	...	8	...	20	1	2	...	13	3	56	7	18	...	118	11
Totals	64	6	140	8	531	24	39	2	172	101	491	119	421	7	1,858	267
Totals, 1898	36	3	140	7	520	34	33	6	213	97	418	102	364	9	1,724	258

The number of distinct persons (exclusive of Maoris) imprisoned after conviction, in the past ten years, counting one offence only when the same person was imprisoned more than once, with the proportion per 10,000 persons living, is added:—

Distinct Persons imprisoned after Conviction.

Year.	Prisoners.	Proportion per 10,000 of Population.	Year.	Prisoners.	Proportion per 10,000 of Population.
1890	2,397	38·61	1895	1,930	27·87
1891	2,113	33·55	1896	1,936	27·11
1892	2,164	33·69	1897	1,884	25·84
1893	2,111	31·92	1898	1,982	26·92
1894	1,955	28·78	1899	2,125	28·33

There has been since 1890 a decrease of 11·35 per cent. in the number of distinct convicted prisoners, and a reduction of 10·28 per 10,000 in the proportion to population. In New South Wales the proportion for 1898 was 66 per 10,000 persons.

It must be understood that the actual number of imprisonments was much in excess of the figures given, as many persons were several times imprisoned, either for offences differing in kind or for repetitions of the same offence. Thus, persons returned as imprisoned for larceny underwent other imprisonments for drunkenness, &c. Some returned as convicted of drunkenness were several times in gaol during the year for the same offence, or for another, such as assault, riotous or indecent conduct, &c. Often there were several charges preferred against the same person at the one time, of which the most serious followed by conviction has been selected.

The proportions in every 100 distinct convicted prisoners belonging to each of the four principal religious denominations, with proportions of prisoners at each age-period, and particulars as to birthplaces, will be found in the Statistical Volume for 1899, on pages 445 and 446.

Cost of Prisoners.

The prisoners in gaols during the year 1899 were maintained at a net cost to the State of £30 15s. 4d. per head, against £27 18s. 10d. in 1898.

Crime amongst the New-Zealand-born.

While the New-Zealand-born formed at the last census 63 per cent. of the whole population of the colony, they contributed in 1896 not more than 25 per cent. of the prisoners received in gaol. Of the New-Zealand-born population, however, a large number are under 15 years of age, a period of life at which there are very few prisoners; and, therefore, another comparison is necessary. It is found that the New-Zealand-born over 15 years formed 44 per cent. of the total population; but, as before stated, New-Zealanders constituted less than 25 per cent. of the total number received in gaols.

The total number of New-Zealand-born distinct prisoners (excluding Maoris) received for the year 1899—563 persons—is found to be 41 in excess of the number for 1898. Of those received in 1899, 105 were under twenty years of age. As before stated, the plan adopted in preparing the foregoing tables is to count each prisoner only once, and to exclude all who are not convicted prisoners, besides dealing only with the number received during the year, instead of with the full number in gaol, which would, of course, include those brought forward from the previous year. The comparative results for a series of years given by this method are held to be more valuable than those brought out by one which includes prisoners merely awaiting trial, and continual repetitions of the same individuals.

Remarks by the Inspector of Prisons.

After commenting, in his report for 1899, on the practice of sending persons supposed to be lunatics and persons suffering from the effects of drink to the prisons for medical treatment, the Inspector concludes with the following suggestions for the improvement of the most eligible of the prisoners in the colony by way of way of affording them farming employment. He says:—

It is believed that a good deal might be done for the better class of prisoners if a State farm was established, where those who may be considered worthy of it might be employed in cultivating both agricultural and garden grounds, looking after cattle, milking, butter-making, or tree-planting. Some years ago, when I was at Dartmoor Prison, a large farm was attached to that prison, and worked entirely by the better class of convicts, with good results. Plantations of the different class of trees required by the Government might form part of such a farm; and, if pedigree stock were kept, the breed of horses and cattle might be considerably improved by allowing stallions and bulls from the farm to serve the settlers' mares and cows. A horse-breeding establishment for remounts might also form part of such an establishment. The scheme appears to me worthy of consideration.

Since the above was written a beginning has been made, by the establishment of a tree-planting prison near Rotorua, as an experiment. The work is being done for the Forest Department.

First Offenders' Probation Act.

One hundred and seventeen persons were placed on probation in the year 1899, as against 91 in 1898. Of these, 38 were discharged after satisfactorily carrying out the conditions of their licenses, 4 were rearrested, and 75 remained under the supervision of Probation Officers.

Of the 1,120 persons placed on probation since the introduction of the Act in October, 1886, no less than 926 had, by the end of the year 1899, been discharged after satisfactorily carrying out the conditions of their licenses, 67 were rearrested and sentenced to various terms of imprisonment, 1 committed suicide, 2 died, 27 absconded, 1 was sent to a lunatic asylum, and 96 remained fulfilling the conditions of their terms of probation. The Inspector of Prisons further remarks:—

"From the foregoing it will be seen that a percentage of 83 have done well, while only a percentage of 2·41 have eluded the vigilance of the Probation Officers and absconded. These statistics speak for themselves, and show that the Probation Officers, who do the work gratuitously, have carefully inquired into and made judicious recommendations in the majority of cases, and are deserving of commendation.

"The above-quoted results prove beyond doubt that the First Offenders' Probation Act, which was placed on the statute-book of the colony to put first offenders under a term of surveillance that is calculated to give them an extra incentive to good behaviour, and to check predilections that might end in a career of crime, is satisfactorily attaining that end. A probationer has ever before his mind the inevitable consequence which will ensue should he deviate from strictest rectitude of conduct during his probation, while he is not in a position to be contaminated by the evil associations which are almost inseparable from a prison life. The State is relieved of the expense of his support, and there is much more inducement to return to the paths of honesty and industry than there would be were he under bars and bolts inside the walls of a felon's cell; and, lastly, he is not branded as a 'gaol-bird.'"

The amount of costs ordered during the year 1899 to be paid by the various Courts before whom first offenders were brought was £461 3s. 7d. The approximate cost of keeping these offenders had they been sent to prison would have amounted to £3,715, which sum, added to the amount of costs, &c., actually paid, gives a saving of £3,945 12s. 11d.

Inquests.

The number of bodies on which inquests were held in 1899 was 965, including 26 Maoris. In 745 cases the bodies were of males, and in 220 of females.

The inquests on suicidal deaths in 1899 show a decrease on the number for the previous year. The figures for five years, according to each year, were:—

Year.	Inquests on Suicides.			Year.	Inquests on Suicides.		
	Males.	Females.	Total.		Males.	Females.	Total
1895 ..	66	10	76	1898 ..	69	8	77
1896 ..	58	12	70	1899 ..	61	13	74
1897 ..	42	11	53				

The verdicts given at the inquests held in 1899 may be classified as under:—

Nature of Verdict.	Inquests on Persons.		
	Males.	Females.	Total.
Accident	305	53	358
Disease and natural causes ..	349	140	489
Intemperance	9	3	12
Homicide	7	5	12
Suicide	61	13	74
Not classed	14	6	20
	745	220	965

Of the accidental deaths, drowning is the most fatal form. The verdicts show that 140 bodies were found drowned, giving a percentage of 39·11 on the accidental deaths from all causes.

Fire Inquests.

The inquests on fires held during 1899 numbered 35. In fourteen cases the verdict was incendiarism; in three, accident; and in eighteen no evidence was forthcoming.

SECTION V.—EDUCATION.

THE replies given by householders to the inquiry on the census schedules for 1896 showed that in every 100 persons living (excluding Chinese), 80·60 per cent. could read and write, 2·89 could read only, and 16·51 were unable to read. The proportion per cent. unable to read fell from 23·72 in 1878 to 21·19 in 1886, and further to 16·51 in 1896. Of those who could read only, the proportion diminished from 6·76 in 1878 till in 1896 it stood at 2·89 per cent.

The following shows the percentages at each census period :—

	Read and Write.			Read only.			Cannot read.		
	Persons.	M.	F.	Persons.	M.	F.	Persons.	M.	F.
1878 ..	69·52	72·11	66·33	6·76	5·91	7·80	23·72	21·98	25·87
1881 ..	71·32	73·31	68·94	5·63	5·01	6·39	23·05	21·68	24·67
1886 ..	74·01	75·40	72·41	4·80	4·36	5·31	21·19	20·24	22·28
1891 ..	77·27	77·97	76·48	3·97	3·74	4·24	18·76	18·29	19·28
1896 ..	80·60	81·06	80·09	2·89	2·71	3·08	16·51	16·23	16·83

Besides the improvement in the degree of education shown above, which is observed in respect of females as well as males, it will be noticed that whereas the difference in the percentage able to read and write is very considerably in favour of the male sex for the year 1878, the proportions approximate more closely at each successive census year, until in 1896 there are found to have been 80·09 per cent. of the female sex who could read and write, against 81·06 of males. Doubtless when the results of the last census are known, the education of the females, taking as a standard the knowledge of reading and writing, will be equal to that of the males. But with a system of free and compulsory education this would be expected in time, and the census results have no longer the degree of importance or interest they had years ago.

In considering the proportions of the population at different age-periods the improvement in education is even more clearly proved. It is found that in 1896, of persons at the age-period 10–15 years, 98·73 per cent. were able to read and write, while 0·65 per cent. could merely read, and 0·62 per cent. were unable to read. The proportion who could not read increased slowly with each succeeding quinquennial period of age until at 50–55 years it stood at 4·04 per cent. At 75–80 years the proportion was 7·05, and at 80 and upwards it advanced to 8·07. Similarly, the proportion of persons who could read only increased from 0·65 at 10–15 years to 3·66 at the period 50–55 years, and again to 9·74 at 80 and upwards. The better education of the people at the earlier ages is thus exhibited.

Further evidences of improved education will be found in the portion of this work relating to marriages, where it is shown that the proportion of persons in every 1,000 married who signed by mark has fallen very greatly since 1881. The figures for the sexes in the year 1881 were 32·04 males and 57·94 females, against 6·19 males and 7·02 females in 1896.

Schools.

It has been found impossible to collect the full statistics relating to schooling for the year 1900 in time for this work, and the figures for the previous year are accordingly given.

The number of schools, teachers, and scholars, as in December, 1899, are shown in the following summary :—

Description of Schools.	Number of Schools.	Teachers.	Scholars.
European.			
Public (Government) schools (scholars other than Maoris and half-castes)	1,645	8,615	128,794
Public (Government) schools (half-castes living among Europeans)			960
Colleges, grammar, and high schools (aided or endowed)	25	145	2,723
Private and denominational schools (excluding Maori scholars)	307	803	15,295
Industrial schools and orphanages	9	..	726
Native village schools, European children attending	..	..	312
Private Native boarding-schools, European children attending	..	..	22
School for Deaf-mutes	1	6	43
Jubilee Institute for Blind	1	1	9
Totals—European	1,988	4,570	148,884

Description of Schools.	Number of Schools.	Teachers.	Scholars.
Native.			
Native village schools supported by Government (excluding European children stated above) ..	84	148	2,753
Private Native boarding-schools (maintenance of scholars paid by Government)	4	12	68
Private Native boarding-schools (maintenance of scholars paid from endowments)			124
Private Native day-schools	3	5	69
Public (Government) schools, Maoris attending	..	..	1,309
Public (Government) schools, half-castes living as Maoris attending	..	..	252
Private and denominational schools for Europeans, Maoris attending	..	..	85
Totals—Native	91	165	4,660

Thus at the end of 1899 there were 2,079 schools of all classes at which members of the European and Maori races were being educated. This was an increase of 39 on the number in 1898. The public primary schools numbered 1,645 in 1899, against 1,624 in 1898. The number of aided or endowed colleges, grammar, and high schools was 25, the same as in the previous year. The number of private schools from which returns were received by the Registrar-General was 307, an increase of 13. There were also nine industrial schools and orphanages, public and private, as well as a school for deaf-mutes subsidised by Government, and a school for the blind.

The number of schools established for the education of the Native or Maori race was 91, four more than in 1898.

Education at the public schools is free (except that, at such as are also district high schools, fees are charged for the teaching of the higher branches) and purely secular. The attendance of all children between the ages of 7 and 13 is compulsory, except when special exemptions are granted, or a child is being otherwise sufficiently educated.

The subjects of instruction at the primary schools are required by the Education Act to be the following: Reading, writing, arithmetic, English grammar and composition, geography, history, elementary science and drawing, object-lessons, vocal music, and (in the case of girls) sewing and needlework, and the principles of domestic economy. Provision must also be made for the instruction in military drill of all boys in these schools.

"The Manual and Technical Instruction Act, 1900," provides for manual and such subjects of technical instruction as are prescribed by regulations under this statute being included in the list of subjects named in the Education Act. Thus manual instruction may be given in ordinary school-hours.

Public (Government) Schools.

Compared with 1898 there was in 1899 a falling-off in the number of pupils belonging to the public schools at the end of the year, as well as in the average attendance, a fact thus commented upon in the report of the Minister of Education:—

The working average, which has been since 1893 the basis upon which the capitation grants are paid to Education Boards, shows for the year 1899 a further falling-off from the number previously reached. For the year 1897 the working average was 112,328; in 1898 it was 111,636; while last year it reached only 110,316, or 1,320 less than the year before. In the calculation of the working average for a given school are omitted all attendances on those half-days on which less than half the pupils on the roll are present; on the other hand, the strict average for any school is found by including all the half-days on which the school is open. The strict average for the twelve months ended the 31st December, 1899, was 108,405, or 1,851 less than for the previous year.

SCHOOL ATTENDANCE AND YEARLY INCREASE FROM 1877 TO 1899.

Year	School Attendance.					Yearly Increase on			
	Number belonging at Beginning of Year.	Number belonging at End of Year.	Average Attendance.		Average Attendance expressed as Percentage of Roll number.	Number belonging at Beginning of Year.	Number belonging at End of Year.	Average Attendance.	
			Fourth Quarter.	Whole Year.				Fourth Quarter.	Whole Year.
1877	...	55,688	...	...	...	...	...	...	...
1878	59,849	65,040	49,485	45,521	...	...	9,352	...	...
1879	59,707	75,566	57,301	53,067	73·8	8,858	10,526	7,886	7,546
1880	68,124	82,401	62,946	60,625	74·6	8,417	6,835	5,645	7,558
1881	74,359	83,560	63,009	61,822	74·2	6,235	1,159	63	1,197
1882	76,309	87,179	66,426	63,709	73·6	1,950	3,619	3,417	1,887
1883	79,416	92,476	70,077	67,373	74·0	3,107	5,297	3,651	3,664
1884	84,883	97,238	74,650	72,657	75·1	5,467	4,762	4,573	5,284
1885	90,670	102,407	80,183	78,327	76·6	5,787	5,169	5,533	5,670
1886	95,377	106,328	83,361	80,737	76·1	4,707	3,921	3,178	2,410
1887	99,206	110,919	87,386	85,637	77·0	3,829	4,591	4,025	4,900
1888	103,534	112,685	90,849	90,108	79·3	4,328	1,766	3,463	4,471
1889	104,919	115,456	94,308	93,374	80·3	1,385	2,771	3,459	3,266
1890	108,158	117,912	96,670	94,632	79·9	3,239	2,456	2,362	1,258
1891	110,665	119,523	96,264	97,058	80·3	2,507	1,611	[−406]	2,426
1892	112,279	122,620	100,917	99,070	80·6	1,614	3,097	4,653	2,012
1893	114,305	124,686	99,872	98,615	78·5	2,026	2,066	[−1,045]	[−455]
1894	116,819	127,309	106,151	103,490	80·6	2,514	2,614	6,279	4,875
1895	119,900	129,856	107,222	106,022	81·4	3,081	2,556	1,071	3,132
1896	122,425	131,037	109,253	108,976	82·1	2,525	1,181	2,031	2,354
1897	123,533	132,197	110,523	110,993	82·9	1,108	1,160	1,270	2,017
1898	123,892	131,621	107,904	110,256	82·4	359	[−576]	[−2,619]	[−737]
1899	123,207	131,315	107,066	108,405	81·2	[−685]	[−306]	[−838]	[−1,851]

The average of the weekly roll-numbers throughout the year was, however, only 242 less than for the year 1898, the figures being 133,540 for 1899 as against 133,782 for 1898.* Expressing the strict average attendance for the year as a percentage of the average weekly roll-numbers, we get 81·2 per cent. as representing the regularity of attendance during the year. This is lower than the corresponding figures for any year since 1894. In 1897 the average attendance reached 82·9 per cent. of the roll, and in 1898, when there was a considerable amount of sickness among children, 82·4 per cent. The table shows the attendance for the twenty-two years that have elapsed since the passing of the Education Act.

It is not easy to assign with any degree of certainty the true causes of the great falling-off in average attendance as compared with the slight decrease in the roll-numbers. There does not appear to have been any unusual amount of sickness among children, or any general prevalence of bad weather during the year. Whatever may have been the cause, the increase in the amount of irregular attendance seems to call for attention on the part of all concerned; there is little doubt that to a certain extent it is preventable.

* The returns furnished to the Registrar-General appear to show that the number on the rolls of private schools, including Roman Catholic schools, increased during 1899 by 513 pupils; the number in public secondary schools increased by seventeen. Taking public primary and secondary schools, and private schools of all kinds, we have therefore a net increase of 288 on the rolls. Now, allowing for deaths of children under five, the number of births in the colony during 1893 and 1894 would make us expect an increased roll-number in 1899 of about 300 children. The agreement between these figures is so close as to lead us to the conclusion that there is little or no increase in the number of children whose names do not appear on any school-roll. The leakage in the yearly average attendance is due, in short, not to the rolls, but to the irregular attendance.

Technical Education.

As stated previously, the new Manual and Technical Instruction Act of 1900 provides for manual and such subjects of technical instruction as are prescribed by regulations under this statute being included in the list of subjects named in the Education Act; and the same Act allows part of the ordinary school-time to be given to elementary manual instruction. During 1899, subsidy was paid on classes in freehand drawing (from flat and round), shading, drawing from nature, painting, modelling, mechanical drawing, engineering and machine construction, geometry and perspective, design and ornament, architecture and building construction, mathematics, natural and experimental science (botany, chemistry, and physics), woodwork, plumbing (theoretical and practical), domestic instruction, English and commercial subjects, and singing.

There are eight fully-equipped Technical or Art Schools, the classes in which during 1899 were attended by about 3,000 students.

In connection with the Canterbury College there is an endowed School of Engineering and Technical Science, the students in which work for the university degree of B.Sc. in engineering. One hundred and six students attended in 1899.

The Canterbury Agricultural College has an endowment of over 60,000 acres of land, and possesses extensive buildings, and an experimental farm of a very complete character. The students work for the university degree of B.Sc. in agriculture. There were thirty-four students in 1899.

There are several Schools of Mines located in districts in which mining is actively carried on, and the Otago University maintains a professorial chair of mining and metallurgy, to which the Government makes an annual grant of £500. The number of students in mining in 1899 was over 300, fifty-six of whom were at the Otago University.

With the view of encouraging attendance at technical schools and classes, arrangements have been made with the Railway Department by which teachers of classes registered with the Minister of Education may give certificates to their pupils which will enable them to obtain railway tickets at special rates.

The following table shows the results of examinations conducted in the colony on behalf of the Science and Art Department, London, and of the City and Guilds of London Institute:—

LONDON TECHNICAL AND ART EXAMINATIONS, 1899.

["C" represents candidates; "P" passes.]

Subjects of Examination.	Auckland.		Wanganui.		Wellington.		Wellington Sub-centres.*		Napier.		Christchurch.		Timaru.		Dunedin.		Invercargill.	
SCIENCE AND ART DEPARTMENT.	C	P	C	P	C	P	C	P	C	P	C	P	C	P	C	P	C	P
Art.																		
Drawing in light and shade (elementary)	19	12	3	2	22	20	1	...	6	3	2	1	...	...	26	19	...	...
Drawing in light and shade (advanced)	13	11	3	1	12	9	...	...	5	1	5	5	1	...	17	12	...	...
Perspective (elementary)	8	8	2	2	6	6	2	1	...	...	..	..	5	5	12	7	...	...
Model drawing (elementary)	19	18	3	3	68	52	4	4	18	13	8	7	1	1	41	34	...	...
" (advanced)	14	14	4	4	7	7	...	...	6	4	5	5	1	1	7	4	...	...
Freehand drawing of ornament (elementary)	18	16	22	12	70	62	11	7	56	33	19	17	10	8	81	73	..	...
Freehand drawing of ornament (advanced)	17	15	3	3	12	11	...	...	...	...	5	5	1	1	12	7	...	...
Geometrical drawing (art)	11	7	...	...	...	...	...	...	...	...	...	..	3	3	12	10	...	...
Design (elementary)	...	...	...	...	8	3	..	...	...	...	4	2	1	1	...	...	...	...
Painting from still life	7	4	3	1	6	3	...	.	...	...	1	1	...	...	...	...	...	...
Drawing from the life		...	...	.	3	...	...	...	...	...	3	2	...	...	3	...	...	...
Drawing from the antique ...	9	7	2	2	2	...	...	...	...	...	...	...	...	...	4	2	...	...
Painting ornament	...	...	1	1	...	..	...	...	...	...	...	...	...	...	2	...	...	...
Principles of ornament (elementary) ...	...	...	2	2	...	.	...	...	...	...	...	...	...	...	1	1	...	...
Students' works	...	...	7	2	24	7	...	...	...	...	4	†4	..	.	10	9	...	...
Science.																		
Practical plane and solid geometry ...	...	...	2	2	7	5	...	...	...	...	3	3	...	.	9	4	...	...
Mathematics, stages 1, 2, 3	..	...	...	...	2	2	...	...	...	...	...	...	...	...	...	...	...	...
Machine construction and drawing ...	23	15	...	...	23	14	...	..	...	...	...	...	...	...	15	11	...	...
Building construction	5	5	...	...	16	12	...	...	...	...	6	5	...	...	8	7	...	...
Steam	6	6	...	...	7	6	...	...	...	...	...	..	...	...	1	1	...	...
Human physiology	...	..	...	...	...	...	...	...	...	...	..	..	2	2	...	..	...	..
Inorganic chemistry (theory) ...	..	...	...	...	...	...	2	2	...	...	..	..	...	...	1	1	...	...
" (practical) ...	...	...	...	...	..	...	...	...	...	...	..	..	...	...	1	1	..	...
Agriculture	...	...	.	...	...	...	2	...	..	..	..	..	...	...	1	1	...	...
Botany	...	...	...	...	1	1	...	...	...	...	...	...	.	.	..	...	...	...
Applied mechanics	...	...	...	...	1	1	...	.	...	...	...	...	...	...	1	1	...	...
Theoretical mechanics (solids) ...	...	...	...	.	...	...	...	...	...	...	..	..	...	...	1	1	...	...
Sound, light, and heat	...	..	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...
CITY AND GUILDS OF LONDON INSTITUTE.																		
Telegraphy and telephony	...	...	...	...	1	..	..	...	...	...	...	...	...	...	...	...	...	...
Electric lighting (honours)	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...
Brickwork	...	...	...	...	1	1	...	...	...	...	...	...	...	.	...	...	...	...
Carpentry and joinery (preliminary) ...	...	..	1	1	1	1	...	...	...	...	...	...	...	...	...	...	.	...
" (ordinary) ...	...	...	1	1	1	1	...	...	...	...	...	...	...	...	3	3	...	...
" (honours) ...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Woodwork, first year	...	...	2	2	...	...	...	...	...	...	4	4	...	...	..	..	...	1
" final	...	...	...	...	...	...	...	...	...	...	9	6	...	...	...	...	2	2
Bookbinding	...	..	...	...	..	...	...	...	...	...	...	...	...	...	1	1	...	...
Cookery	...	...	.	...	...	...	...	...	...	...	...	...	...	...	7	3	...	...
Mechanical engineering	...	.	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...
Plumbing (preliminary)	...	...	...	...	...	...	...	...	...	...	..	..	...	...	4	4	...	...
" (written)	2	...	...	...	11	4	...	...	...	...	..	..	...	...	5	4	...	...
" (practical)	2	2	...	...	12	5	..	...	...	...	..	..	...	...	...	...	...	...
Totals	173	140	61	41	329	234	22	14	91	54	78	67	25	22	287	222	3	2

Total of papers, 1,069; total of passes, 796.

* Pahiatua, Masterton, and Inglewood. † Christchurch also obtained a book prize and a silver medal for works.

The twenty-second annual report of the Minister of Education gave the following remarks on manual training and technical instruction:—

We are, perhaps, in danger of forgetting that manual training—the specific training of the hand and eye in conjunction with the brain—involves not so

much the introduction of a new subject as a change of method in the treatment of nearly all the subjects included in the school course; that it not only develops powers that would often otherwise remain dormant, but provides, amidst the complexity of the demands of modern educational systems, the key to a true co-ordination so long sought for by Herbart and other earnest teachers. If our pupils are taught by direct observation of things, and if at the same time their constructive and creative activities are called into play, the different parts of their education are truly co-ordinated, because the various subjects of instruction are all, in a real sense, co-ordinated with nature. All other co-ordinations are more or less artificial. The principle of natural co-ordination is in reality an extension of the ideas of Froebel as exemplified in the best kindergartens. The same principle can be applied throughout all education—not only in the infant classes, but also in the higher stages of primary education, in secondary, and even in university education. Some of our best teachers already recognise this fact, and herein consists our best hope not merely for manual and technical education, but for a general advance in the intellectual training of the nation.

We must come to realise the fact that, unless we assign to eye and hand and ear their proper place in each subject, the path of progress is closed to us. This is quite obvious in regard to skill in the industries, technical or agricultural, and, on careful thought, in regard also to commercial or professional knowledge; hence the demand for technical education, which is a projecting, out of the realm of general education into that of special education, of the principles already enunciated.

It has been said that "manual training includes all processes that train the muscles and the mind to work in harmony." At the same time that the hand is being practised in movements of dexterity, there are stimulated in the mind the observation of form and the appreciation of beauty, which are the elements of artistic taste. The first step towards actually realising this would be the improvement of drawing in the schools, so that it might become truly a mode of expression rather than a mere slavish imitation of drawing-book copies. This, on the side of the arts, would give rise to original design; while the constructive instinct would concentrate the ideas of measurement, the perception of the relations of form, and of the properties of matter, into creative effort.

One of the healthiest effects of manual training, and a sufficient justification for its inclusion in a scheme of general education, is that it trains the judgment to deal with practical life; it thus fosters the constructive instinct, and counteracts the tendency of a too exclusively bookish school system towards sedentary occupations and town life; while, by opening out new avenues for the natural activities, it enables the teacher or the parent to discover more easily the natural bent of a boy or girl. The same ideas that prompt manual training will lead to making concrete teaching the basis of all mathematical instruction; to the greater use of open-air teaching in geography and the natural sciences in preference to the use of books; to work in physical and chemical science that is experimental and based on individual effort; to teaching in history that does not separate it from the political and social life of the present; possibly also to methods of language-teaching in which emphasis is laid not on the dry bones of grammar, but on the actual use of a language for speaking, reading, and writing. Fallacies die hard; were it not so, it would never be contended that these new methods give an intellectual training inferior to that given by the old bookish methods. On the contrary, we have lost the full value even of books, because they deal so much with what are to us abstractions; if the things they treat of were actually known to us, how many books would live that now are nothing but *words!* Slavery to formal examination tests has perhaps been one of the greatest obstacles to progress, and should accordingly be guarded against in the future.

In short, in order that the introduction of manual training into our primary and secondary schools may have its full beneficial effect, this training should be an organic part of the education of the schools; and, that being so, it should be given within the school-hours, and as far as possible by the ordinary teacher, who should be trained for that purpose.

School or Instructor.	Subjects of Instruction (grouped), and Average Attendance.													Payments.	
	Freehand (from Flat and Round) and Shading.	Drawing from Nature, Painting, and Modelling.	Mechanical Drawing and Engineering, and Machine Construction.	Geometry and Perspective.	Design and Ornament.	Architecture, and Building Construction.	Mathematics.	Natural and Experimental Science (Botany, Chemistry, and Physics).	Woodwork.	Plumbing (Theory and Practice).	Domestic Instruction.	English, and Commercial Subjects.	Singing.	Capitation.	Special Grants.
														£ s. d.	£ s. d.
Technical Classes Association, Auckland	5	..	..	2	..	9	4	..	10	5	..	..	..	90 19 7	150 0 0
"Elam" School of Art, Auckland ..	19	10	..	22	..	..	..	..	..	..	..	..	..	59 17 5	..
Payton, Mr. E. W., Auckland ..	8	..	..	..	..	..	..	..	..	..	..	..	..	5 16 0	..
Robinson, Mr. W. I., Auckland ..	..	..	45	17	..	..	..	..	..	..	..	..	..	40 0 5	..
Education Board, Auckland—															
Devonport Public School	..	..	..	..	..	..	..	..	12	..	..	..	..	8 10 0	..
Remuera Public School	..	..	..	..	..	..	..	..	7	..	..	..	..	3 18 9	..
Education Board, Wanganui—															
Technical School, Wanganui ..	34	10	15	26	4	7	5	15	28	..	29	16	..	64 11 3	..
Technical classes, Palmerston North ..	13	..	..	23	..	..	..	..	..	..	..	..	..	16 11 5	..
" " Hawera	10	3	..	11	..	..	..	..	6	..	121*	..	..	44 18 10	..
Education Board, Wellington—															
Technical School, Wellington ..	616	280	137	232	98	106	113	..	422	143	520	103	263	373 0 7	..
Paraparaumu Public School ..	..	..	..	..	..	..	..	..	7	..	..	..	..	1 4 9	..
Petone Boys' Institute	..	..	6	..	..	..	..	..	..	..	..	..	..	10 16 3	..
Caverhill, Miss L. L., Petone, Wel'gton	..	13	..	..	..	..	..	..	..	..	..	..	..	10 14 1	..
Technical School, Masterton	23	..	..	..	..	..	..	11	..	..	44	..	..	41 7 6	..
Anderson, Mr. R. N., Napier	52	..	..	..	..	..	..	..	..	..	..	..	..	33 6 7	..

Education Board, Napier—																			
Napier Public School	..	49	..	51	51	..	..	..	..	..	..	..	..	16	1	4	..		
Education Board, Marlborough—																			
Blenheim Public School	..	..	..	..	..	..	..	..	..	..	..	24	..	10	7	4	..		
Renwick Public School	..	..	..	..	..	..	..	..	..	..	..	16	..	6	3	5	..		
Education Board, Nelson—																			
Nelson cookery class	..	..	..	..	..	..	..	..	..	..	87	..	..	10	17	6	..		
Education Board, Grey—																			
Greymouth Public School	..	..	..	..	..	..	..	..	12	..	..	..	..	15	7	9	..		
Education Board, Westland—																			
Kumara Public School	..	..	..	..	..	..	..	..	9	..	..	..	..	15	12	8	..		
Canterbury College—																			
School of Art, Christchurch ..	295	92	..	119	27	18	..	..	13	..	..	..	..	168	11	9	..		
School of Engineering and Technical Science, Christchurch	..	..	127	41	..	..	..	..	..	..	..	..	..	75	16	3	..		
School of Domestic Instruction, Christ'ch	..	..	..	..	..	..	..	..	..	..	235	..	..	105	3	9	65	0	0
Education Board, North Canterbury—																			
Normal School	..	..	..	..	..	..	..	..	61	..	..	..	..	32	10	0	..		
Amberley Public School	..	..	..	..	..	..	..	..	..	..	33	..	..	13	2	10	..		
Leeston Public School	..	..	..	..	..	..	..	..	12	..	20	..	..	21	1	10	..		
Technical Classes Association, Dunedin	..	..	62	..	..	..	27	63	30	21	46	201	..	45	11	4	..		
" " Balclutha	..	..	..	..	..	..	..	..	16	..	..	..	..	3	0	0	..		
" " Waiwera S.	..	6	..	..	..	..	..	..	..	..	..	..	..	6	6	5	..		
" " Invercargill	19	..	37	..	..	9	..	12	86	..	43	27	..	49	11	6	..		
Education Board, Otago—																			
School of Art, Dunedin	150	20	16	76	10	10	..	..	..	..	..	..	..	181	8	0	..		
Balclutha Public School	..	..	..	..	..	..	..	..	16	..	..	..	..	3	6	0	..		
Tokomairiro Public School	..	..	..	..	..	..	..	..	18	..	..	..	..	7	15	9	..		
Kidston Hunter, Mr. A. G., Dunedin ..	..	..	..	..	..	..	..	20	..	..	..	..	..	12	11	4	..		
Total	1,244	483	445	620	190	159	149	121	765	169	1,178	387	263	1,607	0	2	215	0	0

* Includes attendance at Hawera, Patea, Waverley, Manaia, and Eltham.

New Zealand University.

The introduction of university education into New Zealand was effected by the Superintendent and Provincial Council of Otago, who in 1869 passed an Ordinance under which the University of Otago was established. Following closely on the founding of this institution was the establishment of the University of New Zealand under an Act of the General Assembly, "The New Zealand University Act, 1870." This University subsequently received a Royal charter, whereby the degrees which it confers are declared entitled to "rank, precedence, and consideration" throughout the British Empire "as fully as if the said degrees had been conferred by any university of the United Kingdom." It was apparently contemplated by Parliament (*vide* section 19 of the Act last quoted) that the New Zealand University and the Otago University should be amalgamated; but the negotiations for this purpose having failed the two institutions remained for some time distinct bodies. In the year 1874, however, the University of Otago surrendered or put in abeyance its power of conferring degrees, and became affiliated to the University of New Zealand, and at the same time it was stipulated that the University of New Zealand should not directly exercise functions of teaching.

In the year 1873 the Superintendent and Provincial Council of Canterbury passed an Ordinance for founding "The Canterbury College," and the college was accordingly established with the same standard of university education as that of the University of Otago, but without the power of conferring degrees.

In December, 1878, a Royal Commission on University and Secondary Education was appointed by the Governor, which met in July, 1879, and reported that two colleges, with an income of £4,000 each, ought to be established in Auckland and Wellington, and that suitable buildings, at a cost of £12,500 each, should be erected in those cities. In the following year the Royal Commission repeated these recommendations.

"The Auckland University College Act, 1882," which became law on the 13th September in that year, definitely established the college, and endowed it with a statutory grant of £4,000 per annum. By "The Auckland University College Reserves Act, 1885," three blocks of land, containing about 10,000 acres each, and a block containing about 354 acres, which had been devoted to the purpose of promoting higher education in the Province of Auckland, became vested in the Council of University College.

The Auckland University College was affiliated to the University of New Zealand by the Senate of the university on the 6th March, 1883, and on the 21st May in the same year the college was opened by the Governor.

Nothing was done for Wellington until the year 1894, when an Act was passed entitled "The Middle District of New Zealand

University College Act, 1894," which said " There shall be established in the City of Wellington a college to be connected with the University of New Zealand," and provision was made for a governing body to be called the Council, but no provision was made for any pecuniary grant nor any endowment, and, though certain members of the Council were appointed, nothing could be done for want of funds.

Not until 1897 were the needs of Wellington actually attended to. In the session of Parliament that year the Right Hon. Mr. Seddon, P.C., Premier of the colony, introduced the Victoria College Act: an Act, as stated in the preamble, "to promote Higher Education by the establishment of a College at Wellington in commemoration of the sixtieth year of the reign of Her Majesty Queen Victoria," the college being intended to embrace in its work the Provincial Districts of Wellington, Taranaki, Hawke's Bay, Nelson, Marlborough, and Westland. The Act was passed on the 22nd December, 1897, and the Council was formed as provided in the Act, and the work of organization was begun. The Act provides for the payment out of the Consolidated Fund of a grant of £4,000 a year, and also requires the Council to give six scholarships each year, called " Queen's Scholarships," to persons of either sex under the age of fourteen years, upon the results of an examination under such conditions as the Council may provide. The Act further sets apart a parcel of land 4.000 acres in extent in the Nukumaru Survey District (Wellington Provincial District) as an endowment for the college.

The Council of the college has established four chairs: classics, English, mathematics and mathematical physics, and chemistry and physics; and lectureships in French, German, mental science, jurisprudence and constitutional history, general history, and political economy and law. It is intended as funds allow to add other subjects.

The New Zealand University is not a teaching body, as above explained, undergraduates hitherto for the most part keeping their terms at one or other of the affiliated institutions: the Auckland University College, the Victoria College, the Canterbury College, and the University of Otago, each of which has now a staff of professors and lecturers. On the 1st June, 1900, the number of graduates who had obtained direct degrees was 699.

The number of undergraduates on the roll of the University at that date was 2,172 (exclusive of such as had not performed any academical act for a period of ten years), but only 880 were keeping terms (not including undergraduates who had not, in the last two years, entered at a college or come up for any college or university examination), of whom 586 were males and 294 females. Ninety of the males and seventeen of the females were medical students. The numbers of students attending lectures at the affiliated institutions during the year 1899-1900 were as follow: At the Auckland University College, 108 matricu-

lated and 112 non-matriculated; at Canterbury College, 117 matriculated and 65 non-matriculated; at the Otago University, 202 matriculated and 39 non-matriculated. The Victoria College before-mentioned, affords further facilities for university students and in June, 1900, had a total of 123 students on the roll.

Private and Denominational Schools.

There were 307 private schools in the colony at the end of 1899, an increase of 13 on the number in 1898: 27 were for boys, 50 for girls, and 230 for children of both sexes. The number of pupils attending them was 15,295—namely, 6,219 boys and 9,076 girls, not counting Maoris, 59 boys and 26 girls. The number of European pupils at these schools was more than in 1898 by 513. Of the private schools, 133 were Roman Catholic, with an attendance of 10,526 pupils.

The following gives, for the past ten years, the number of private schools and of Europeans attending them, the number of Roman Catholic schools and pupils being also shown separately:—

Year.	Number of Private Schools.	Pupils.			Included in Previous Numbers.	
		Boys.	Girls.	Totals.	Roman Catholic Schools.	Pupils at Roman Catholic Schools.
1890	298	5,759	7,867	13,626	108	9,474
1891	281	6,234	7,908	14,142	110	10,144
1892	274	6,321	8,135	14,456	105	10,111
1893	299	6,431	8,491	14,922	111	10,263
1894	302	6,117	8,510	14,627	117	9,953
1895	298	6,187	8,472	14,659	114	10,458
1896	283	5,845	8,102	13,947	115	9,590
1897	278	5,974	8,473	14,447	120	9,642
1898	294	6,043	8,739	14,782	124	10,175
1899	307	6,219	9,076	15,295	133	10,526

The total number of children of European descent (including such half-castes as live among Europeans) known to be receiving education at school at the end of 1899 was 148,884; of these, 140,959 were from 5 to 15 years of age. The census showed also 6,352 children receiving tuition at home in 1896, against 8,178 in 1891. No doubt increased school accommodation in country places does away with the need for tutors and governesses to a certain extent.

The distribution of the private schools in the various provincial districts of the colony is shown in the two following tables:—

PRIVATE AND DENOMINATIONAL SCHOOLS, 1899.—SUMMARY BY PROVINCIAL DISTRICTS.

Provincial Districts.	Number of Schools.				Number of Teachers.			Number of Scholars.			Daily Average Attendance.		
	Boys.	Girls.	Mixed.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Auckland	4	10	66	80	25	153	178	1,325	2,179	3,504	1,117	1,886	3,003
Taranaki	...	1	12	13	1	25	26	157	275	432	123	223	346
Hawke's Bay	4	5	9	18	8	41	49	481	563	1,044	414	477	891
Wellington...	6	10	40	56	37	139	176	1,319	1,860	3,179	1,150	1,635	2,785
Marlborough	1	...	7	8	...	14	14	129	167	296	114	134	248
Nelson	3	4	9	16	10	31	41	367	482	849	339	413	752
Westland	1	...	9	10	3	21	24	298	305	603	252	255	507
Canterbury	6	12	44	62	18	140	158	1,242	1,727	2,969	1,047	1,489	2,536
Otago	2	8	34	44	13	124	137	901	1,518	2,419	777	1,320	2,097
Totals	27	50	230	307	115	688	803	6,219	9,076	15,295*	5,333	7,832	13,165

* Exclusive of 85 Maoris (59 boys, 26 girls).

NOTE.—Denominational schools, such as Roman Catholic and Anglican, are included in the above as private schools. Particulars for the Roman Catholic schools in December, 1899, are as under:—

SUMMARY OF ROMAN CATHOLIC SCHOOLS.

Provincial Districts.	Number of Schools.				Number of Teachers.			Number of Scholars.			Daily Average Attendance.		
	Boys.	Girls.	Mixed.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
Auckland	3	8	23	34	9	76	85	821	1,353	2,174	575	1,158	1,833
Taranaki	...	1	3	4	...	13	13	114	175	289	90	142	232
Hawke's Bay	2	3	3	8	3	29	32	367	447	814	308	372	680
Wellington	3	4	12	19	18	62	80	855	1,111	1,966	758	982	1,740
Marlborough	1	...	3	4	...	9	9	118	117	235	104	89	193
Nelson	2	3	4	9	...	21	21	169	356	545	171	301	472
Westland	1	...	8	9	3	20	23	285	294	579	243	246	489
Canterbury	3	5	13	21	10	60	70	902	1,152	2,054	753	1,000	1,753
Otago	2	3	20	25	11	68	79	806	1,064	1,870	711	931	1,642
Totals	17	27	89	133	54	358	412	4,457	6,069	10,526	3,813	5,221	9,034

Schools for Natives.

The number of Native village schools at the end of 1899 either supported or subsidised by the Government was 85, or four more than at the end of the previous year. In addition, there were four boarding-schools for Native children, the cost of whose maintenance was partly paid either by the Government or from endowments, and three private Native day-schools. The number of Maori children attending schools during the fourth quarter of 1899 was 4,660—namely, 2,707 males and 1,953 females. These included 302 half-castes at the Native village schools who were living as members of Maori tribes, and 252 at public European schools.

The numbers at the several schools in 1898 and 1899 were as follow:—

Schools.	Maori Children attending Schools.					
	Boys.		Girls.		Total of both Sexes.	
	1899.	1898.	1899.	1898.	1899.	1898.
At public European schools ..	914	834	647	529	1,561	1,363
At Native village schools ..	1,567	1,531	1,186	1,161	2,753	2,692
At subsidised or endowed boarding-schools	112	106	80	105	192	211
At private European or Native schools	114	100	40	44	154	144
Totals	2,707	2,571	1,953	1,839	4,660	4,410

There was thus, in 1899, an increase of 136 in the number of Maori boys, and 114 in the number of Maori girls, attending school.

Sixty-five out of the eighty-five Native village schools in operation on 31st December, 1899, were under the charge of masters, and twenty under mistresses; there were besides sixty-three assistants, and eleven sewing-mistresses. The salaries paid to the head-teachers range from £100 to £275, and those for assistants and sewing-mistresses from a nominal sum to £50.

The expenditure on Native schools for 1899 was as follows: Teachers' salaries and allowances, £13,586 18s. 5d.; books and school requisites, £499 7s. 7d.; repairs and small works, £535 5s. 9d.; inspection, £962 2s. 7d.; boarding-schools and scholarships, £1,809 6s. 4d.; buildings, fencing, furniture, &c., £5,477 13s. 6d.; sundries, £160 6s. 4d.: total, £23,031 0s. 6d.

Income and Expenditure of Education Boards.

The total income of the various Education Boards for the year 1899 was £483,558. The grants by Government amounted to £436,052, a decrease of £27,353 on the grants in 1898. These grants consist of (*a*) a statutory allowance of £3 15s. per child in daily average attendance, (*b*) a further capitation allowance of 1s. 6d. for scholarships, (*c*) a varying sum for school buildings, and (*d*) grants for technical education. The income from reserves

amounted to £40,803, and that from local receipts, interest, and miscellaneous sources to £6,702.

The total expenditure in 1899 amounted to £503,286, of which the sum of £408,509 was laid out on the maintenance of the schools, £14,434 used to meet expenses of the Boards, £13,720 spent on inspection of schools and examination of pupil-teachers, £56,749 on school buildings, £9,212 for manual and technical instruction, and £660 on miscellaneous services, including salaries of truant officers.

The receipts and expenditure of the Education Boards, numbering thirteen altogether, are tabulated below, with further particulars:—

RECEIPTS AND EXPENDITURE OF EDUCATION BOARDS.

Receipts.	£	s.	d.	*Expenditure.*	£	s.	d.
To Balance, 1st January, 1899	25,047	19	11	By Boards' administration ...	14,434	8	5
Government grants—				Inspection and examination	13,720	6	9
Maintenance	386,121	6	11	Teachers' salaries and allowances, and training	365,379	16	11
Buildings	49,118	4	6	Incidental expenses of schools	34,705	1	9
Technical	812	15	2	Scholarships	8,424	4	2
Reserves revenues ...	40,803	16	7	Manual and technical instruction	9,212	7	4
Local receipts—				Interest	170	18	10
Fees, donations, &c. ...	5,001	6	11	Buildings, sites, plans, &c.	56,749	5	4
Rents, sales, &c. ...	1,384	12	10	Refunds and sundries ...	460	1	2
Interest	108	13	7	Balances	5,320	13	10
Refunds, deposits, &c.	207	8	1				
	£508,606	4	6		£508,606	4	6

Particulars of the scholarships and the expenditure of the Boards thereon in 1899 are given in detail. The only institutions for the training of teachers are in North Canterbury and Otago. These two institutions have received grants-in-aid of £300 each.

SCHOLARSHIPS.

Education Districts.	Number held in Dec., 1899.	Boys.	Girls.	Period of Tenure.	Boards' Expenditure on Scholarships in 1899.	Annual Value, &c.
				Years.	£ s. d.	
Auckland ...	82	49	33	3	1,779 7 11	6 at £30, 23 at £25, 21 at £20, 32 at £15.
Taranaki ...	12	7	5	2	256 9 10	1 at £35, 1 each at £19, £17, and £14, 8 at £10.
Wanganui ...	17	11	6	Varies	610 19 3	13 at £40, 1 at £20, 3 at £15
Wellington ...	40	24	16	2	854 8 0	7 at £35, 33 at £15.
Hawke's Bay ...	27	14	13	2	444 13 10	6 at £30 4s., 4 at £12 4s., 17 at £10 4s.
Marlborough ...	5	3	2	2	200 0 0	5 at £40.
Nelson	6	3	3	2	377 9 0	6 at £52 10s.
Grey	8	4	4	3	75 0 0	4 at £35, 4 at £10.
Westland ...	8	3	5	2	105 18 0	1 at £23, 1 at £16, 1 at £15 10s., 1 at £8 18s., 4 at £8.
North Canterbury	37	21	16	2	1,475 15 7	19 at £40, 18 at £20.
South Canterbury	29	17	12	Varies	380 16 10	Varies from £28 to £2 10s.
Otago	50	31	19	Varies	1,275 12 4	6 at £40, 8 at £35, 22 at £20, 2 at £17, 12 at £15.
Southland ...	20	14	6	Varies	587 13 7	12 at £35, 8 at £20.
Totals, 1899 ...	341	201	140	...	8,424 4 2	
Totals, 1898 ...	332	205	127	...	8,109 8 8	

Income and Expenditure of Secondary or Superior Schools.

A summary of the accounts of income and expenditure for the year 1899, as furnished by the governing bodies of the secondary or superior schools in the colony, shows the total receipts to have been £62,802. To this total, rents and sales of reserves contributed £24,831; interest on investments, and other receipts from endowments, £4,645; fees, £30,203; and miscellaneous, £3,123.

The total expenditure amounted to £65,659, of which sum office management and expenses absorbed £2,255; teachers' salaries, £32,712; scholarships and prizes, £2,663; buildings, furniture, insurance, rates, and rent, &c., £16,494; and other expenditure, £11,535.

A summary of the accounts for the year 1899, exhibiting further details, is given below:—

SECONDARY OR SUPERIOR SCHOOLS, 1899.

Receipts.	£ s. d.	*Expenditure.*	£ s. d.
To Credit balances on 1st January, 1899	20,538 10 9	By Liabilities on 1st January, 1899	3,549 18 3
Endowment reserves sold	3,900 16 11	Office management and expenses	2,255 5 1
Rents of reserves ...	20,930 17 0	Teachers' salaries ...	32,712 12 4
Interest on investments	1,626 2 3	Boarding-school accounts	4,192 14 11
Reserves Commissioners	3,016 12 8	Examination fees and expenses	587 4 11
School fees	24,713 6 1	Scholarships and prizes ...	2,663 18 0
Boarding-school fees ...	5,489 10 2	Printing, stationery, and advertising	1,438 15 5
Books, &c., sold, and refunds	84 16 5	Cleaning, fuel, light, &c....	1,372 12 7
Sundries not classified ...	3,008 10 9	Buildings, furniture, rent, insurance, rates, &c. ...	16,493 17 0
Interest on current account	29 13 2	Interest	1,841 0 7
Debit balances, 31st December, 1899	3,679 9 8	Sundries not classified ...	2,100 19 0
		Credit balances, 31st December, 1899	17,811 7 9
	£87,020 5 10		£87,020 5 10

Industrial Schools.

The cost of the Government schools and the amount recovered (from Charitable Aid Boards, from parents, from sale of farm produce, &c.) are next shown:—

COST OF GOVERNMENT INDUSTRIAL SCHOOLS, 1899.

School.	Gross Cost of School.	Cost of Boarding out (Included in preceding column).	Salaries of School Staff. (Included in first column.)	Recoveries.	Net Cost.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Auckland ..	1,345 17 1	688 0 8	157 10 7	357 0 1	988 17 0
Burnham ..	6,871 13 0	2,580 14 9	950 18 7	1,636 15 7	5,234 17 5
Caversham ..	7,671 9 8	3,167 2 8	926 16 2	3,651 8 8	4,020 1 0
Totals ..	15,888 19 9	6,435 18 1	2,035 5 4	5,645 4 4	10,243 15 5
Salary and expenses of Visiting Officer		..	..	..	362 4 3
Contingencies		..	..	..	9 9 1
Total		..	..	..	10,615 8 9

The next table shows payments made by the Government on account of inmates in private industrial schools, the recoveries, and the net expenditure by the Government. The contributions from Charitable Aid Boards to these schools, being made directly to the managers, are not included in the recoveries shown.

GOVERNMENT EXPENDITURE ON PRIVATE INDUSTRIAL SCHOOLS (R.C.), 1899.

School.	Payments.	Recoveries.	Net Expenditure by Government.
	£ s. d.	£ s. d.	£ s. d.
St. Mary's, Auckland	1,124 6 0	33 17 4	1,090 8 8
St. Joseph's, Wellington ..	433 10 0	61 3 2	372 6 10
St. Mary's, Nelson	1,888 15 6	333 5 8	1,555 9 10
St. Vincent de Paul's, Dunedin	9 1 9	..	9 1 9
Totals	3,455 13 3	428 6 2	3,027 7 1

During 1899, inmates were maintained in four other institutions, and the expenditure on this account was as follows: Mission Home, Jerusalem, Wanganui (Mother Aubert's), £124 16s.; St. Mary's, Richmond, Christchurch, £45 11s. 5d.; Samaritan Home, Christchurch, £3 9s.; Mount Magdala, Christchurch, £208 0s. 11d.

The total number of inmates of the two kinds of industrial schools is given for the years 1898 and 1899, and the variations in the numbers boarded out, in residence, or at service:—

INMATES, 1898 AND 1899.

	Boarded out.				In Residence				At Service, &c.				Totals.			
	Dec., 1898.	Increase.	Decrease.	Dec., 1899.	Dec., 1898.	Increase.	Decrease.	Dec., 1899.	Dec., 1898.	Increase.	Decrease.	Dec., 1899.	Dec., 1898.	Increase.	Decrease.	Dec., 1899.
Government Schools—																
Auckland	41	3	..	44	11	..	2	9	27	9	..	36	79	10	..	89
Burnham	171	..	13	158	92	12	..	104	233	29	..	262	496	28	..	524
Caversham	191	15	..	206	78	9	..	87	207	..	5	202	476	19	..	495
Private Schools—																
St. Mary's, Auckland	2	..	2	..	78	18	..	96	15	14	..	29	95	30	..	125
St. Joseph's, Wellington	3	..	..	3	64	..	13	51	21	7	..	28	88	..	6	82
St. Mary's, Nelson ..	6	..	..	6	245	..	16	229	64	37	..	101	315	21	..	336
St. Vincent de Paul's, South Dunedin	..	..	..	..	5	9	..	14	..	3	..	3	5	12	..	17
Totals ..	414	18	15	417	573	48	31	590	567	99	5	661	1,554	120	6	1,668

In the Government schools the policy is to board out all children of suitable age and character. The authorities of the private schools do not adopt the boarding-out system.

Institute for the Blind.

The Jubilee Institute for the Blind is a private institution, and is not in any way under Government control, although it has received grants from time to time out of the Consolidated Revenue, and receives payment from the Education Department on account of pupils for whose tuition the department is responsible.

The payments made on behalf of such pupils to the Institute during the year amounted to £324 5s. 3d., towards which the parents contributed £19 18s. The number of pupils at the end of 1899 was nine.

School for Deaf-mutes.

The roll of this school includes, with one or two exceptions, all the known deaf-mutes of school age and of sound intellect in the colony who have been brought under the notice of the Education Department. The method of instruction used at Sumner is the oral method, in favour of which there is a vast predominance of expert opinion.

Sunday-schools.

As to attendance at Sunday-schools, figures can only be given for years when the census was taken. For these, a comparison can be made if the teachers be included with the scholars. Proceeding on these lines, a large development is found since 1878:—

ATTENDING SUNDAY-SCHOOLS (INCLUDING TEACHERS).

Census Year.	Totals.	Males.	Females.
1878	62,273	30,707	31,566
1886	99,884	48,509	51,375
1896	116,045	54,063	61,982

The excess of females over males would seem as time goes on to grow greater, both numerically and in proportion to the numbers attending Sunday-school.

The number of scholars at the Sunday-schools in 1896 was 104,934, of whom 50,096 were boys and 54,838 girls. The teachers were 11,111 of both sexes, 3,967 being males and 7,144 females.

PLACES OF WORSHIP.

The total number of buildings returned as used for public worship in 1896 was 1,987, of which 1,431 were churches or chapels. These last increased by 234, or 19 per cent. on the number returned in 1891. The schoolhouses used for worship in 1896 and 1891 were 366 and 241 for the respective years; 190 dwelling-houses were used as churches or chapels. Sitting accommodation was found for 334,509 persons in all buildings utilised for public worship; and the numbers attending services amounted in the aggregate to 209,731. These numbers show increase at the rate of 20·28 and 18·46 per cent. respectively since 1891, while the

increase of population during the interval between the two censuses was at the rate of 12·24 per cent.

The number of persons belonging to each denomination in the colony was stated under the head of "Religion" on page 107 of the Year-book, 1898.

The following gives the buildings in use for purposes of public worship by the various denominations, as returned at the census of April, 1896:—

Denominations.	Churches and Chapels.	School-houses used for Public Worship.	Dwellings or Public Buildings used for Public Worship.	Number of Persons.	
				For whom Accommodation.	Attending Services.
Church of England ..	414	105	33	76,811	48,117
Roman Catholics ..	212	8	7	52,267	36,080
Catholic Apostolic Church	1	..	..	100	50
Presbyterians	301	152	45	75,881	48,751
Methodists—					
Wesleyan Methodists*	249	60	27	55,772	35,445
Independent Wesleyans	1	1	..	259	180
Primitive Methodists ..	45	9	4	9,325	5,436
Scandinavian Methodists	1	..	..	80	50
Other Denominations—					
Baptists	34	1	1	8,630	5,652
Congregational Independents	20	5	1	6,700	3,475
Lutherans	15	1	..	1,510	806
Society of Friends ..	1	..	..	60	25
Brethren	27	..	9	5,309	2,040
Christian Disciples ..	2	..	1	262	222
Church of Christ ..	15	1	5	4,765	2,738
Christadelphians ..	3	..	4	395	138
New Church (Swedenborgian)	1	..	..	100	40
Seventh-day Adventists	5	..	..	700	254
Students of Truth ..	1	..	..	1,200	500
New and Latter House of Israel	1	..	..	50	13
Salvation Army ..	61	10	30	24,178	15,777
Undenominational ..	15	13	23	9,265	3,508
Hebrews	5	..	..	810	380
Confucians	1	..	..	80	50
Buildings open to more than one denomination (included in the above)	[15]	[22]	[9]	[3,855]	[2,062]
Totals, 1896 ..	1,431	366	190	334,509	209,731
Totals, 1891 ..	1,197	241	161	278,114	177,055

* Includes United Free Methodists and Bible Christians, which bodies amalgamated with the Wesleyan Methodist Church on 13th April, 1896.

The number of buildings, in each provincial district of the colony, used for public worship in 1896 was:—

Provincial Districts.	Churches and Chapels.	School-houses used for Public Worship.	Dwellings or Public Buildings used for Public Worship.	Number of Persons.	
				For whom Accommodation.	Attending Services.
Auckland	329	98	61	78,104	45,270
Taranaki	62	5	16	13,173	7,378
Hawke's Bay	83	20	13	17,526	11,485
Wellington	209	22	26	49,320	31,973
Marlborough	28	1	2	4,809	3,361
Nelson	93	34	11	17,963	10,521
Westland	42	3	2	7,955	5,001
Canterbury	277	61	15	62,884	42,615
Otago	308	122	44	82,775	52,127
Totals, 1896 ..	1,431	366	190	334,509	209,731
Totals, 1891 ..	1,197	241	161	278,114	177,055

Public Libraries, Literary and Scientific Institutions.

Although the number of these institutions only increased from 298 to 304 between the years 1891 and 1896, according to the census returns, it will be found that the membership increased from 14,489 to 17,638, or at the rate of 21·73 per cent. There was also a large increase of books (23·83 per cent.), which numbered 330,770 in 1891, and 409,604, in 1896. In considering these facts it must be borne in mind that the population increased 12·24 per cent. in the quinquennium.

The details for all provincial districts are given, which shows that Auckland and Otago had 75 institutes each, and Canterbury 73. In membership Otago stands highest, and Auckland second; but according to number of books Auckland takes first place, Canterbury next, and Otago third.

Provincial Districts.	Number of Institutions.	Number of Members.	Number of Books.
Auckland	75	3,741	106,577
Taranaki	6	378	7,700
Hawke's Bay	17	1,513	22,955
Wellington	21	3,029	49,712
Marlborough	5	234	7,783
Nelson	25	679	27,363
Westland	7	355	6,602
Canterbury	73	3,647	93,981
Otago	75	4,062	86,931
Totals, 1896	304	17,638	409,604
Totals, 1891	298	14,489	330,770
Totals, 1886	303	13,684	292,108
Totals, 1881	225	12,868	198,520
Totals, 1878	187	12,092	173,021

SECTION VI.—LOCAL GOVERNING BODIES.

Counties, Boroughs, etc.

For purposes of local government New Zealand is divided into counties and boroughs. Although the boroughs, of which there were 101 in March, 1900, lie geographically within the counties, yet by the law they are not considered as part of them. On the 31st March, 1900, the counties numbered 85. The number is increased from time to time as need is found for further division. In the year 1878 there were only 63 counties. Interior to the counties are the road and town districts, but much of the country is outlying, many road districts having been merged, especially on goldfields territory. There were, however, 235 road districts (4 without Boards) in existence in March, 1900, and 35 town districts. One of these latter is the special Town District of Rotorua, constituted under "The Thermal-Springs Districts Act, 1881." Besides the above there were 28 river protective districts (excluding Inch Clutha, in Bruce County, which is also a road district), 1 drainage district (Christchurch), 2 water-supply districts, and 16 land drainage districts under the Land Drainage Act of 1893. The Harbour Boards numbered 26.

These bodies levied rates in the financial year 1899–1900 to the amount of £714,151, of which £495,907 consisted of general rates, and £218,244 special and separate rates. The sum of £79,728 was raised by licenses, and £19,778 by other taxes, making £813,657 altogether, which sum is equivalent to £1 1s. 7d. per head of the mean European population. In the year 1898–99 the local taxation was £1 1s. 2d. per head, or 5d. less than in 1899–1900.

It will be seen from the table on the next page that since 1881 revenue derived from rates has nearly trebled itself, having increased from £249,087 in 1880–81 to £714,151 in 1899–1900. Revenue from Government and other sources has, on the other hand, decreased in the same period, twenty years, from £352,540 to less than one-half, viz., £152,044. Receipts which cannot be classed as "revenue" were £889,705 in 1880–81, against only £372,028 in 1899–1900; but these figures vary from year to year according to circumstances, such as large operations by way of construction of works, for which money has to be specially raised.

The receipts (distinguishing revenue from other sources of income) and expenditure of the various local bodies, with the amount of rates collected, and the amount of indebtedness on account of loans for each of the past twenty years, are shown in the following table:—

LOCAL GOVERNING BODIES.—RATES, RECEIPTS, EXPENDITURE, AND LOANS, 1881 TO 1900.*

Year ended 31st March.	Receipts of Local Bodies.						Expenditure of Local Bodies.†	Outstanding Loans of Local Bodies (excluding Government Loans; for which see the following Columns).	Government Loans to Local Bodies.	
	Revenue from.				Receipts not Revenue.	Total Receipts.			Outstanding Debentures under "The Roads and Bridges Construction Act, 1882."	Net Indebtedness in February of each Year under "The Government Loans to Local Bodies Act, 1886" (including Debentures under the Roads and Bridges Construction Act, converted).
	Rates.	Licenses, Tolls, Rents, and other Sources.	Government.	Total Revenue.						
	£	£	£	£	£	£	£	£	£	£
1881 ..	249,087	461,602	352,540	1,063,229	889,705	1,952,934	1,871,752	3,039,807	..	..
1882 ..	297,328	476,473	218,179	991,980	419,608	1,411,588	1,637,337	3,277,584	..	..
1883 ..	327,129	466,885	133,565	927,579	311,466	1,239,045	1,397,863	3,540,046	..	..
1884 ..	398,659	502,969	241,558	1,143,186	331,994	1,475,180	1,499,117	3,962,330	77,439	..
1885 ..	401,393	477,813	364,082	1,243,288	430,561	1,673,849	1,653,706	4,313,223	123,086‡	..
1886 ..	410,639	504,807	377,811	1,293,257	514,728	1,807,985	1,644,706	4,943,270	134,534	..
1887 ..	434,237	447,631	342,432	1,224,300	992,633	2,216,933	1,885,001	5,620,747	113,072	..
1888 ..	433,832	460,210	334,857	1,228,899	511,594	1,740,493	1,819,787	5,812,803	18,635	191,687
1889 ..	445,929	535,140	141,288	1,122,357	316,139	1,438,496	1,560,605	5,892,050	10,495	273,289
1890 ..	460,303	568,405	139,320	1,168,028	206,688	1,374,716	1,476,540	5,978,059	9,676	319,603
1891 ..	463,581	518,757	144,008	1,126,346	236,902	1,363,248	1,381,320	6,042,693	4,317	367,715
1892 ..	488,824	584,274	109,022	1,182,120	214,124	1,396,244	1,400,467	6,081,934	4,245	449,532
1893 ..	508,157	573,161	136,515	1,217,833	340,538	1,558,371	1,482,548	6,203,869	3,465	525,173
1894 ..	551,412	547,560	134,271	1,233,243	623,038	1,856,281	1,589,124	6,614,824	2,685	547,679
1895 ..	581,868	545,629	138,228	1,265,725	328,798	1,594,523	1,584,518	6,685,510	2,015	621,903
1896 ..	592,903	581,966	156,180	1,331,049	269,145	1,600,194	1,627,079	6,737,578	1,442	667,451
1897 ..	598,526	586,599	178,448	1,363,573	246,919	1,610,492	1,636,716	6,793,398	1,077	709,282
1898 ..	644,552	608,436	182,166	1,435,154	304,645	1,739,799	1,733,016	6,834,361	712	742,530
1899 ..	685,769	642,289	178,438	1,506,496	385,368	1,891,864	1,778,574	6,963,254	347	789,618
1900 ..	714,151	695,988	152,044	1,562,183	372,028	1,934,211	1,960,073	7,057,350	..	810,192

*The figures for the Christchurch Drainage Board and Harbour Boards included are for the calendar years ended three months previous to the financial years. †Not including balances, deposits, or amounts paid to sinking funds and for redemption of debentures. ‡On the 30th June.

The indebtedness of local governing bodies on account of outstanding loans has increased in twenty years by nearly 132 per cent., from £3,039,807 to £7,057,350, exclusive of moneys borrowed from Government under "The Roads and Bridges Construction Act, 1882," and "The Government Loans to Local Bodies Act, 1886," which represented a further indebtedness of £810,912 at the end of March, 1900.

Taxation by Local Bodies.

Table showing the Revenue of Local Governing Bodies derived from Rates, Licenses, and other Taxes during the Year 1899–1900.

Local Bodies.	Rates.				Licenses.	Other Taxes.	Total.
	General.		Special and Separate.				
	£ s. d.		£ s. d.		£ s. d.	£ s. d.	£ s. d.
Counties* ...	189,227	5 4	36,327	14 3	21,736 7 3	10,567 14 9	257,859 1 7
Boroughs* ...	144,682	0 11	163,237	11 7	52,574 12 2	6,900 9 11	367,394 14 7
Town Boards* ...	3,208	14 4	131	6 4	3,650 7 7	211 14 9	7,202 3 0
Road Boards* ...	89,118	6 7	12,968	0 2	1,767 3 4	2,097 16 9	105,951 6 10
River Boards* ...	7,525	18 6	2,212	17 7	...	...	9,738 16 1
Land-drainage Boards* ...	2,133	15 10	817	4 10	...	...	2,951 0 8
Harbour Boards†	37,991	3 8	...		...	...	37,991 3 8;
Christchurch Drainage Board†	22,019	10 10	...		...	...	22,019 10 10
Waimakariri-Ashley Water-supply Board*	...		2,549	1 10	...	...	2,549 1 10
Totals ...	495,906	16 0	218,243	16 7	79,728 10 4	19,777 16 2	813,656 19 1§

* For year ended 31st March, 1900. † For year ended 31st December, 1899.
; Wharfage dues, charges, fees, tolls, rents, &c., amounting to £340,623 13s. 1d., have not been classed as taxation. § Equal to £1 1s. 7d. per head of the mean European population of the colony for the financial year 1899-1900.

Receipts and Expenditure, 1899–1900.

A summary of all the transactions for the year 1899–1900 is given on pages 193, 194. The total revenue of the local bodies for the financial year was £1,562,183, and they further received a sum of £372,028 which could not properly be termed "revenue," making altogether a grand total of receipts amounting to £1,934,211. The rates formed 46 per cent. of the revenue proper. Licenses, rents, and other sources yielded 44 per cent., and 10 per cent. was granted by the General Government.

While the revenue proper of the counties amounted to £369,798, of which these bodies raised £225,554 by way of rates, the Road Boards' revenue was only £154,267, out of which £102,086 represented the result of their rating. The boroughs had the far larger revenue of £556,181, including £307,919 of rates, and their receipts under the heading of licenses, rents, and other sources amounted to the considerable sum of £234,115. In the matter of receipts from Government, of which a table is printed on the next page, the counties received the bulk of the money.

The details of amounts received, representing Government support to the various bodies, are stated in the following table :—

LOCAL GOVERNING BODIES.—RECEIPTS FROM GOVERNMENT, 1899-1900.

—	Counties.	Boroughs.	Town Boards.	Road Boards.	River Boards (excluding Inch-Clutha, also Road Board).	Land Drainage Boards.	Harbour Boards.	Waimakariri Water-supply Board.	Totals.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Rates on Crown and Native lands ...	14 11 9	72 15 5	...	75 10 6	...	...	...	...	162 17 8
One-third receipts from land sold on deferred payment and from perpetual lease	14,016 18 9	...	3 11 10	7,897 12 9	...	...	...	...	21,918 3 4
One-fourth of rents from small grazing-runs	2,852 6 1	...	...	442 10 7	...	...	...	...	3,294 16 8
Goldfields revenue and gold duty ...	39,344 7 2	1,083 12 2	...	223 18 2	...	...	...	...	40,651 17 6
Subsidies under the Local Bodies' Finance and Powers Act	40,284 8 8	12,119 3 3	563 0 8	16,884 0 3	...	...	...	...	69,850 12 10
Fees and fines under the Financial Arrangements Act	917 16 0	353 12 4	2 11 1	13 12 5	...	...	...	...	1,287 11 10
Other receipts	940 3 1	516 17 9	20 2 6	5,131 0 0	1,250 0 0	52 10 0	6,966 18 4	...	14,877 11 8
Total Revenue Account	98,370 11 6	14,146 0 11	589 6 1	30,668 4 8	1,250 0 0	52 10 0	6,966 18 4	...	152,043 11 6
Loans under Government Loans to Local Bodies Act	29,217 0 0	8,156 5 0	...	16,891 6 3	7,000 0 0	500 0 0	...	1,000 0 0	62,764 11 3
Grants for special works, &c.	69,115 1 1	2,360 12 4	...	560 17 6	...	...	...	36 12 6	72,073 3 5
Total receipts from Government	196,702 12 7	24,662 18 3	589 6 1	48,120 8 5	8,250 0 0	552 10 0	6,966 18 4	1,036 12 6	286,881 6 2

LOCAL GOVERNING BODIES.—RECEIPTS, EXPENDITURE, AND LOANS, 1899-1900.

Financial Year ended 31st March, 1900.

—	Counties.	Boroughs	Town Boards	Road Boards.	River Boards (excluding Inch-Clutha, also Road Board).	Land Drainage Boards.	Waimakariri Water-supply Board.	Totals.
Receipts:—	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Revenue rom—								
Rates	225,554 19 7	307,919 12 6	3,340 0 8	102,086 6 9	9,738 16 1	2,951 0 8	2,549 1 10	654,139 18 1
Licenses, rents, and other sources	45,373 2 4	234,115 12 10	6,604 1 5	13,108 17 2	4,027 8 0	98 16 9	32 7 9	363,860 6 3
Government*	98,370 11 6	14,146 0 11	589 6 1	30,668 4 8	1,250 0 0	52 10 0	...	145,076 13 2
County	...	...	141 10 2	8,403 17 7	...	...	...	8,545 7 9
Total revenue	369,798 13 5	556,181 6 3	10,674 18 4	154,267 6 2	15,016 4 1	3,102 7 5	2,581 9 7	1,111,622 5 3
Receipts not revenue ...	122,954 18 0	103,555 18 7	718 3 5	19,648 8 5	6,465 2 0	500 6 0	2,047 5 2	255,890 1 7
Total receipts	492,753 11 5	659,737 4 10	11,393 1 9	173,915 14 7	21,481 6 1	3,602 13 5	4,628 14 9	1,367,512 6 10
Expenditure:—								
Public works	364,922 16 10	253,710 19 1	7,712 7 5	123,962 12 2	16,972 12 9	2,006 2 1	1,926 5 9	771,213 16 1
Charitable aid and hospitals	37,737 3 10	26,590 15 4	264 18 10	10,049 0 10	...	...	...	74,641 18 10
Management	48,841 11 6	53,840 18 5	1,689 5 4	15,777 5 10	1,581 9 2	359 2 6	320 17 0	122,410 9 9
Other expenditure	62,881 18 1	310,257 16 4	2,068 7 4	25,463 6 4	6,755 17 3	1,074 8 10	1,237 9 10	409,739 4 0
Total expenditure ...	514,383 10 3	644,400 9 2	11,734 18 11	175,252 5 2	25,309 19 2	3,439 13 5	3,484 12 7	1,378,005 8 8
Liabilities (including loans) ...	829,027 3 6	3,296,204 10 6	5,679 18 1	356,219 2 10	70,007 19 6	26,624 3 4	22,415 1 0	4,606,177 18 9
Loans †	6,900 0 0	2,939,025 0 0	649 0 0	2,800 0 0	40,895 0 0	...	21,200 0 0	3,011,469 0 0‡

* For amounts under various heads see preceding table; also for specification of loans under Government Loans to Local Bodies Act, and special grants, which are here included with "Receipts not revenue." †For rates of interest see page 196. ‡Not including loans, amounting to £810,192, repayable by instalments under "The Roads and Bridges Construction Act, 1882," and "The Government Loans to Local Bodies Act, 1886."

NOTE.—The return of receipts and expenditure in this summary represents the *net* receipts and expenditure of the year, exclusive of credit and debit balances, bank overdrafts, deposits, amounts paid to sinking funds, and for redemption of debentures

LOCAL GOVERNING BODIES.—RECEIPTS, EXPENDITURE, AND LOANS—*continued.*

—	Financial Year ended 31st December, 1899.		Totals—all Local Bodies.
	Harbour Boards.	Drainage Board.	
Receipts:—			
Revenue from—	£ s. d.	£ s. d.	£ s. d.
Rates	37,991 3 8	22,019 10 10	714,150 12 7
Licenses, rents, and other sources ...	381,955 10 4	1,627 11 5	687,443 8 0
Government*	6,966 18 4	...	152,043 11 6
County	...	...	8,545 7 9
Total revenue	426,913 12 4	23,647 2 3	1,562,182 19 10
Receipts not revenue	116,138 2 1	...	372,028 3 8
Total receipts	543,051 14 5	23,647 2 3	1,934,211 3 6
Expenditure:—			
Public works	117,663 9 9	3,537 6 5	892,414 12 3
Charitable aid and hospitals... ...	...	...	74,641 18 10
Management	11,900 6 6	808 13 4	135,119 9 7
Other expenditure	431,308 9 2	16,848 19 5	857,696 12 7
Total expenditure	560,872 5 5	21,194 19 2	1,960,072 13 3
Liabilities (including loans)	3,973,180 9 3	203,762 4 5	8,783,120 12 5
Loans†	3,845,881 0 0	200,000 0 0	7,057,350 0 0

* † See notes to table on previous page.

The expenditure of the local bodies amounted to £1,960,072. In the counties the cost of management, including salaries, travelling-expenses, rent, printing and advertising, collection of rates or tolls, legal expenses, and sundries, was £48,841. The Borough Councils expended in the same way £53,840, and the Road Boards £15,777. The percentages borne by the cost of management to the total receipts and total expenditure were:—

Cost of Management per Cent. of	Total Receipts.	Total Expenditure.
Counties	9·9	9·5
Boroughs	8·2	8·4
Road Boards	9·1	9·0

LOANS OF LOCAL BODIES.

The outstanding loans of local governing bodies form the subject-matter dealt with in the two next tables. From them it will be seen that the total amount owing was, on the 31st March, 1900, £7,057,350. But against this accrued sinking funds to the value of £700,720 were held, leaving a net debt of £6,356,630, exclusive of moneys borrowed from the General Government and repaid by annual instalments.

The total annual charge (excluding exchange and commission) stood at £398,590, of which £367,019 were for interest, and the remainder, £31,571, contributions to sinking fund accounts.

Of the total net indebtedness in 1899–1900 the debt of the Harbour Boards, £3,543,055, formed the largest item, while the Borough Councils owed £2,582,124.

In the second table (page 196) will be found a summary of the amounts raised by loan, classified according to the rates of interest paid, distinguishing loans raised in the colony from those raised abroad. It will be noticed that the amount raised abroad (£5,478,300) is nearly four times as great as that raised in New Zealand (£1,579,050). The lowest rate of interest paid was 3 per cent., but the large sum of £2,757,281 was raised at 5 per cent., and £2,477,364 at 6 per cent., while £154,100 bore interest as high as 7 per cent.

LOANS OF LOCAL BODIES, MARCH, 1900.—NET INDEBTEDNESS AND ANNUAL CHARGE.

	Amount of Debentures and Stock in Circulation.	Amount of Accrued Sinking Fund.	Net Indebtedness.	Annual Charge (excluding Exchange and Commission).		
				Interest.	Sinking Fund.	Total.
	£	£	£	£	£	£
Counties	6,900	663	6,237	375	108	483
Boroughs	2,939,025	356,901	2,582,124	158,364	11,160	169,524
Town Boards	649	68	581	36	15	51
Road Boards	2,800	..	2,800	138	..	138
River Boards	40,895	8,801	32,094	2,148	500	2,648
Water-supply Board	21,200	475	20,725	1,015	200	1,215
Harbour Boards	3,845,881	302,826	3,543,055	192,943	17,588	210,531
Drainage Board	200,000	30,986	169,014	12,000	2,000	14,000
Totals	7,057,350	700,720	6,356,630	367,019	31,571	398,590
Inscribed debt of local bodies under "The Government Loans to Local Bodies Act, 1886" (including inscribed stock exchanged for debentures under "The Roads and Bridges Construction Act, 1882")	810,192	..	810,192*	..	..	54,596
Totals	7,867,542	700,720	7,166,822	..	..	453,186

* Repayable by annual instalments of £54,596, representing 5 per cent. per annum on £1,091,922, the amount inscribed to 1st February, 1900. Payments for 26 years of 5 per cent. per annum on the amount inscribed (£1,091,922, including £89,878 debentures under "The Roads and Bridges Construction Act, 1882," exchanged) would be £1,419,499. The actual repayments to date are £366,249, leaving £1,053,250 to be paid by way of interest and sinking fund on a present indebtedness of £810,192.

Loans of Local Bodies, raised within and without the Colony.

Table showing the Amount of Indebtedness of Counties, Boroughs, Town, Road, River, and Water-supply Boards, as on the 31st March, 1900, and of Harbour and Drainage Boards as on the 31st December, 1899, classified according to the Rates of Interest paid, distinguishing Loans raised in the Colony from those raised elsewhere. (See note ‡)

Loans raised in the Colony.

Local Bodies.	No Interest.	3 %	3½ %	4 %	4½ %	5 %	5¼ %	5½ %	5¾ %	6 %	6½ %	7 %	Total.
	£	£	£	£	£	£	£	£	£	£	£	£	£
Counties	..	..	..	..	..	4,900	..	..	..	1,000	..	1,000	6,900
Boroughs	25,000	..	..	140,470	67,575*	114,156	18,000	64,400	5,000†	219,424	2,600	86,400	743,025
Town Boards	..	..	109	..	..	..	..	..	..	540	..	..	649
Road Boards	..	..	..	..	500	2,300	..	..	..	..	..	..	2,800
River Boards	..	..	..	..	5,000	425	..	3,320	..	6,150	..	..	14,895
Water-supply Board ..	..	..	..	..	9,000	12,200	..	..	..	..	..	..	21,200
Harbour Boards ..	..	14,031	..	623,900	20,000	96,000	..	32,000	..	3,450	..	200	789,581
Total raised in colony ..	25,000	14,031	109	764,370	102,075*	229,981	18,000	99,720	5,000†	230,564	2,600	87,600	1,579,050

Loans raised outside the Colony.

Boroughs	..	..	..	33,000	254,700	798,000	..	..	..	1,043,800	..	66,500	2,196,000
River Boards	..	..	..	..	..	21,000	..	..	..	5,000	..	..	26,000
Harbour Boards ..	..	..	..	250,000	100,000	1,708,300	..	..	..	998,000	..	..	3,056,300
Drainage Board ..	..	..	..	..	..	..	..	..	..	200,000	..	..	200,000
Total raised outside colony	..	..	..	283,000	354,700	2,527,300	..	..	..	2,246,800	..	66,500	5,478,300

Total Loans raised.

Counties	..	..	..	..	..	4,900	..	..	..	1,000	..	1,000	6,900
Boroughs	25,000	..	..	173,470	322,275*	912,156	18,000	64,400	5,000†	1,263,224	2,600	152,900	2,939,025
Town Boards	..	..	109	..	..	..	..	..	..	540	..	..	649
Road Boards	..	..	..	..	500	2,300	..	..	..	..	..	..	2,800
River Boards	..	..	..	..	5,000	21,425	..	3,320	..	11,150	..	..	40,895
Water-supply Board ..	..	..	..	..	9,000	12,200	..	..	..	..	..	..	21,200
Harbour Boards ..	..	14,031	..	873,900	120,000	1,804,300	..	32,000	..	1,001,450	..	200	3,845,881
Drainage Board ..	..	..	..	..	..	..	..	..	..	200,000	..	..	200,000
Total loans raised ..	25,000	14,031	109	1,047,370	456,775*	2,757,281	18,000	99,720	5,000†	2,477,364	2,600	154,100	7,057,350

* Including £4,000 at 4¼ per cent. and £500 at 4⅜ per cent. † Including £2,000 at 5·7 per cent. ‡ Not including loans, amounting to £810,192, repayable by annual instalments under "The Roads and Bridges Construction Act, 1882," and "The Government Loans to Local Bodies Act, 1886."

Referring once more to the comparative table on page 190, and to the great advance in local bodies' debts, it will be found that between 1885–86 and 1895–96 the gross indebtedness increased from £4,943,270 to £6,737,578, an addition of £1,794,308 for the period, or 36·30 per cent. Between the same (census) years population advanced from 578,482 to 703,360, the increase having been 124,878 persons, or 21·59 per cent. The wealth of the colony was estimated at about £170,000,000 in 1886 and £215,000,000 in 1896, an accretion of £45,000,000 during the ten years. Thus, while the population of New Zealand increased by 21·59 per cent. in ten years, and wealth by 26·47 per cent., the debt of the local governing bodies advanced at the higher ratio of 36·30 per cent. during the same period.

The aggregate interest-charge for the year under review was £367,019, and £293,109 of this was payable on loans raised outside the colony. The average rate of interest payable to bondholders was rather more than £5 4s. 4d. per cent., as shown hereunder:—

Loans raised by Local Bodies.	Debentures and Stock in Circulation.	Interest-charge.	Average Rate of Interest.
	£	£	%
In the colony	25,000	Nil.	..
Outside the colony ..	1,554,050	73,910	4·7560
	5,478,300	293,109	5·3504
Total (excluding loans from Government) ..	7,057,350*	367,019	5·2190*

While the average rate of interest on the above-mentioned debt is found to be nearly 5¼ per cent., over two millions and three quarters were raised at 5 per cent., and nearly two and a half millions at 6 per cent.

"The Government Loans to Local Bodies Act Amendment Act, 1899."

In view of the general lowering of rates of interest, this new Act modifies the terms of the principal Act by providing, in respect of the debentures of any future loan, instead of interest payable at 5 per cent. for a term of twenty-six years, one or other of the following alternatives:—

Four and a half per cent. per annum for a term of twenty-six years;

Four per cent. per annum for thirty-two years; or

Three and a half per cent. per annum for forty-one years.

The loans in existence at the passing of the Act may be readjusted so as to come under one or other of the alternatives under the new amendment as quoted above.

The rate of 1½ per cent. per annum, which under the Act of 1892 forms the basis for calculating the amount payable to the sinking

* The £25,000 on which no interest is paid has not been taken into account in computing the average rate of interest.

fund, is now reduced to £1 per cent. per annum, if the currency of the loan is thirty-two years, and 10s. per cent. if the currency is for forty years.

Rateable Value of Property in Counties and Boroughs.

The aggregate value of rateable property in all boroughs, road, town, and outlying districts in the colony on the 31st March, 1898, was:—

Local Bodies.	Rateable Property. £	Total. £
Boroughs	4,247,099	
Boroughs (annual value, £2,184,174,* capitalised at 6 per cent.)	36,402,900	40,649,999
Counties—		
Road districts	38,599,042	
Town districts	879,126	
Town districts (annual value, £29,611,* capitalised at 6 per cent.)	493,516	
Outlying	35,335,454	75,307,138†
Total rateable value of property ..		£115,957,137

Here the total value of rateable property in counties amounts to £75,307,138, and that in boroughs to £40,649,999.

The total value of rateable property in the colony, therefore, according to returns furnished by the local bodies, amounted, in March, 1898, to £115,957,137, exclusive of five counties where there are no local bodies raising revenue.

Some of the boroughs and town districts rate on a capital value, but most of them upon an annual value of property. In the foregoing statement the annual value has, where necessary, been capitalised at 6 per cent.

In case of the boroughs, the Act under which the valuation is made provides for a reduction from the renting-value of 20 per cent. on houses and buildings, and 10 per cent. on land. The actual annual value of the properties will, therefore, be greater than the rating value by from 11 to 25 per cent.

The figures given above are taken from returns furnished by local bodies containing information obtained prior to the general valuation of land and improvements by the Commissioner of Taxes, which will be found described in section sixteen.

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* By "The Rating Act, 1894," "the 'rateable value' of any property means the rent at which such property would let from year to year, deducting therefrom 20 per centum in case of houses, buildings, and other perishable property, and 10 per centum in case of land and other hereditaments, but shall in no case be less than 5 per centum on the value of the fee-simple thereof." The values stated in the tables are taken from returns rendered by the local bodies.

† Exclusive of property in Counties of Rotorua, East Taupo, West Taupo, Kawhia, and Sounds, where there are no local bodies raising revenue.

"THE MUNICIPAL FRANCHISE REFORM ACT, 1898."

This is a law extending and amending the franchise in the case of boroughs, and provides that, in addition to the persons who are already entitled to be enrolled, every person shall be so entitled who possesses the freehold or residential qualifications stated in the Act.

The possession of the freehold qualification is defined as being the beneficial owner of a freehold estate in land of the capital value of not less than £25, situated in the borough, notwithstanding that the person may be already enrolled, or entitled so to be, as a ratepayer of the borough.

Every person is deemed to possess a residential qualification within a borough if he is, and for at least three months last past has been, a residential occupant within such borough.

No person may be entered in the burgess lists in respect of more qualifications than one; but (except in the case of a ratepayer) any person who has more than one qualification may select the one in respect of which he wishes to be entered.

In the case of husband and wife, any qualification possessed by one of them is deemed to be possessed by each.

No person enrolled on a burgess roll has more than one vote, and no person enrolled by virtue of the residential qualification can vote on any proposal relating to loans or rates.

RATING ON UNIMPROVED VALUE.

"The Rating on Unimproved Value Act, 1896," gives power to local governing bodies to levy rates upon the unimproved instead of upon the capital (or annual) value of real property, provided that the proposal to do so has been demanded by the required proportion of ratepayers, submitted to the ratepayers' vote, and declared carried by a majority of the valid votes recorded by at least one-third of the ratepayers on the roll.

Rates made and levied under this Act must be so adjusted as to equal as nearly as may be, but not exceed in their producing capacity, rates made and levied on the capital (or annual) value under "The Rating Act, 1894," see special article in Part III.

Up to the end of March, 1901, twenty-five local governing bodies (twelve boroughs, seven counties, one town district, and five road districts) had notified in the *New Zealand Gazette* that the proposal to levy rates on the unimproved value of land had been carried, while in nine cases (six boroughs and three counties) the proposal had been rejected.

The amount of rates levied by the various Borough Councils, County Councils, Town Boards, and Road Boards, with other particulars, as returned by these bodies for the 31st March, 1900, will be found on the following pages:—

Boroughs, 1899–1900.

[The populations given are those ascertained by the census, 1901, although the other figures relate to the financial year, 1899–1900.]

Name of Borough.	Estimated Area (including Town Belt) in Acres.	Population.	Number of			Amount of Rate levied in the Pound.					Estimated Annual (or rental) Value of Rateable Property in March, 1900.	Capital Value of Rateable Property, March, 1900.	Unimproved Value of Rateable Property, March, 1900.
			Dwellings.	Ratepayers	Rateable Properties.	General.	Separate.	Special.	Water.	Library.			
						s. d.	s. d.	s. d.	s. d.	s. d.	£	£	£
Whangarei ..	1,825	1,429	370	326	416	0 $0\frac{3}{4}$	..	..	..	..	..	104,493	..
Birkenhead ..	2,736	1,057	160	206	273	1 3	0 $2\frac{1}{4}$	0 $3\frac{3}{4}$	..	..	6,860	..	..
Devonport ..	640	3,823	698	637	1,075	1 0	..	6d. & 9d.	6d., or $2\frac{1}{2}$ per cent.	..	25,777	..	..
Auckland ..	1,762	34,213	7,000	4,658	6,033	1 0	0 2	1 0	$2\frac{1}{2}$ per cent.(1)	0 $0\frac{1}{2}$	315,517	..	..
Grey Lynn ..	900	4,110	668	598	796	1 0	0 3	0 4	4 to 6 per cent.	..	23,569	..	..
Newmarket ..	150	2,060	410	292	363	1 3	..	0 7	4 to 6 per cent.	..	12,329	..	..
Parnell ..	480	4,566	920	583	852	1 3	..	1 0	4 per cent.	..	29,225	..	..
Onehunga ..	1,200	3,015	660	580	1,000	1 0	..	..	4 per cent.	..	16,420	..	..
Te Aroha ..	200	888	139	201	201	0 9	..	..	0 7	..	5,541	..	..
Thames ..	2,560	4,009	..	885	1,564	1 2	0 4	..	$2\frac{1}{2}$ per cent.	0 1	27,649	..	..
Hamilton ..	1,600	1,253	415	380	650	1 0	..	..	..	..	7,826	..	..
Cambridge ..	1,083	989	254	230	688	1 0	..	..	..	..	4,746	..	..
Tauranga ..	1,000	945	380	415	620	1 0	..	1 0	..	..	4,415	..	..
Gisborne ..	1,260	2,737	490	458	800	1 3	..	0 6	..	..	29,343	..	..
New Plymouth	850	4,405	796	809	1,134	1 3	..	0 10	(2)	..	33,000	..	..
Stratford ..	1,920	2,027	370	457	601	0 $0\frac{15}{16}$	..	$\frac{9}{32}$d., $\frac{7}{32}$d., $\frac{3}{32}$d.	..	..	..	125,720	..
Hawera ..	500	2,131	500	420	610	1 3	..	..	..	..	16,626	..	..
Patea ..	1,420	691	250	186	380	1 3	0 $4\frac{3}{8}$	..	0 $1\frac{3}{4}$	..	5,150	..	..
Wanganui ..	1,000	7,329	1,450	..	..	0 11	..	1 2	..	..	52,000	..	..
Marton ..	1,423	1,101	230	255	404	1 1	..	0 6	..	0 1	10,020	..	..
Feilding ..	3,500	2,298	431	448	834	1 3	..	1 0	..	0 1	17,925	..	..
Palmerston N.	4,595	6,534	1,290	1,160	2,536	0 $1\frac{3}{4}$	..	0 $2\frac{13}{60}$	(3)	..	..	..	298,313

Foxton	5,760	1,211	262	302	650	1	3	..	..	..	0 1	6,961	..	..
Hastings	5,740	3,650	783	803	1,364	1	3	..	0 9	..	..	41,000	..	..
Napier	879	8,774	1,835	948	2,580	0	9	..	10d. & 5d.	1 to 2½ per cent.(4)	..	84,379	..	..
Dannevirke	1,222	2,315	405	406	..	1	3	..	3d. & 7d.	2½ to 3¾ per cent.	..	13,825	..	..
Woodville	1,240	920	338	469	469	0	3⅝	..	..	..	..	..	..	40,693
Pahiatua	750	1,209	288	400	455	0	2	0 0½	¼d., 1¼d., & 1⅜d.	..	..	..	..	50,736
Masterton	4,311	3,949	750	637	1,102	1	1	..	..	..	0 1	32,177	..	..
Carterton	1,880	1,205	280	240	304	0	0 15/16	..	..	..	..	..	105,015	..
Greytown	3,907	1,122	240	226	366	1	3	..	..	..	0 1	8,500	..	..
Lower Hutt	3,255	1,822	325	312	424	0	0⅞	..	0 0½	..	..	..	273,825	..
Petone	952	3,780	695	574	1,410	1	3	(5)	0 4	..	..	22,925	..	..
Onslow	2,870	1,499	280	330	370	0	0 15/16	0 0⅛	0 0 9/16	..	..	..	209,000	..
Wellington	1,100	43,638	7,199	5,020	9,690	1	3	0 3	0 11	0 9⅜	0 0¾	436,103	..	..
Karori	5,127	1,212	213	210	319	0	1 7/16	..	⅜d. & ⅞d.	..	..	..	..	102,686
Melrose	4,300	2,995	500	806	1,016	0	1 3/16	0 0⅛(6)	0 0⅛(6)	..	..	..	..	215,985
Picton	560	875	160	266	980	0	0¾	0 0⅛	..	1d. and ½d.	..	..	63,309	..
Blenheim	1,571	3,222	734	580	1,450	1	1½	0 2	2½d (7) & 6d.	..	..	23,782	..	..
Nelson	4,800	7,010	1,407	1,170	2,280	1	1	..	0 1⅛	2 to 3½ per cent.	..	53,024	..	..
Richmond	2,300	543	126	128	137	0	0¾	..	..	4 per cent.(8)	..	..	83,295	..
Motueka	5,643	886	167	152	252	..	..	..	..	..	..	..	84,614	..
Westport	713	2,922	762	852	1,125	1	2	0 6	..	..	..	20,142	..	..
Greymouth	2,000	3,748	770	548	964	0	4	0 0½(9)	..	..	..	..	..	78,425
Brunner	5,700	1,572	281	224	295	1	3	..	1 4	..	..	4,976	..	..
Kumara	842	1,121	266	254	391	0	0 16/16	0 1½	..	..	..	..	25,571	..
Hokitika	1,200	1,946	630	570	665	0	0 15/16	0 1 3/16	0 0¾	..	..	..	105,000	..
Ross	4,196	614	300	354	414	0	0¾	0 0⅞	..	..	..	..	24,982	..
Rangiora	1,040	1,768	397	344	566	0	0¾	..	..	..	..	..	166,066	..
Kaiapoi	1,020	1,795	410	363	614	1	3	..	..	..	..	10,139	..	..
Christchurch	1,249	17,538	3,981	..	4,686	1	0	1 0	2d.(10) & 2½d.	..	..	218,715	..	..
Linwood	659	6,737	1,425	1,127	1,441	0	0 15/16	0 0 5/16	0 0⅛(11)	..	..	..	455,528	..
St. Albans	1,500	6,607	1,380	1,300	1,609	0	0 11/16	0 0 3/32	0 0 20/64	..	..	..	672,644	..
Sydenham	1,190	11,404	2,335	1,950	2,265	0	0⅞	¾d., ⅛d., 9/16d., 4/64d.	..	..	..	..	750,000	..
Woolston*	1,276	2,532	463	480	590	0	0 15/16	0 0 5/32	..	..	..	..	192,707	..

BOROUGHS, 1899-1900—*continued.*

Name of Borough.	Estimated Area (including Town Belt) in Acres.	Population.	Number of			Amount of Rate Levied in the Pound.				Estimated Annual (or renting) Value of Rateable Property in March, 1900.	Capital Value of Rateable Property, March, 1900.	Unimproved Value of Rateable Property, March, 1900.
			Dwellings.	Ratepayers.	Rateable Properties.	General.	Separate.	Special.	Water.	Library.			
						s. d.	s. d.	s. d.	s. d.	s. d.	£	£	£
Sumner ..	4,876	844	188	272	386	1 0	..	0 7	2½ per cent.[12]	..	6,879	..	..
New Brighton	1,500	1,008	220	560	718	1 0	0 2	0 9	..	..	6,500	..	..
Lyttelton ..	2,014	4,023	881	560	793	1 3	..	..	..	..	23,513	..	..
Akaroa ..	221	559	136	128	190	0 0 15/16	..	..	..	..	..	44,138	..
Ashburton ..	680	2,322	490	522	..	1 0	..	..	..	..	20,753	..	..
Temuka ..	..	1,465	320	390	1,409	0 0 3/4	..	0 0 3/8	..	..	..	92,247	..
Timaru ..	1,100	6,424	1,139	950	1,680	1 0	..	1 0	2½ to 5 per cent.	..	45,264	..	..
Waimate ..	649	1,359	560	316	520	1 0	..	..	..	..	7,326	..	..
Oamaru ..	1,111	4,836	1,070	1,129	1,526	1 3	..	1 6	[13]	..	29,183	..	..
Hampden ..	640	331	85	112	120	0 0 1/4	..	..	..	..	..	13,721	..
Palmerston S.	800	738	177	248	360	0 0 3/8	..	..	..	..	..	38,806	..
Hawksbury ..	2,700	690	140	240	440	0 0 1/2	..	..	..	..	..	44,300	..
Port Chalmers	335	2,056	495	466	570	1 0	..	0 6	[13]	..	12,027	..	..
North-East Valley	3,980	3,527	770	1,097	1,130	1 0	0 2	0 6	..	..	17,980	..	..
Maori Hill ..	3,700	1,550	325	351	373	1s. and 1s. 3d.	..	..	..	..	10,167	..	..
West Harbour	1,670	1,465	296	475	633	1 0	..	1 0	..	..	8,863	..	..
Dunedin ..	1,800	24,879	4,898	..	4,593	1 3	..	0 9	[14]	..	239,812	..	..
Roslyn ..	2,000	4,632	850	957	1,066	1 0	1 3	..	..	..	29,943	..	..
Mornington ..	654	4,008	830	810	986	1 3	0 3	0 1½	..	..	22,339	..	..
Caversham ..	1,073	5,266	987	773	1,035	1 3	0 3	0 3	5 per cent.	..	30,974	..	..
St. Kilda ..	463	1,700	288	410	1,397	1 0	0 6	..	6 per cent.	..	9,375	..	..
South Dunedin	413	5,363	1,090	855	1,051	1 3	0 3	0 6	6 per cent.	..	22,213	..	..
Green Island	103	667	150	184	195	1 3	..	..	..	..	2,879	..	..

Mosgiel ..	967	1,463	324	320	510	1	0	..	..	..	..	8,433	..	..
Milton ..	265	1,241	255	225	315	1	3	..	..	..	..	6,889	..	..
Kaitangata ..	1,158	1,463	301	274	528	1	0	0 6	..	..	..	6,410	..	..
Balclutha ..	568	1,017	250	247	290	1	0	0 3	0 3	..	0 1	5,159	..	..
Lawrence ..	640	1,159	241	300	285	1	0	..	..	3d. and 6d.	..	7,743	..	..
Roxburgh ..	400	478	110	62	117	1	0	..	..	..	..	1,527	..	..
Tapanui ..	126	350	130	70	119	1	3	..	..	..	..	2,016	..	..
Naseby ..	112	505	150	145	165	0	9	..	..	[15]	..	2,326	..	..
Cromwell ..	640	642	140	130	235	1	3	..	..	0 10	0 2	3,416	..	..
Alexandra ..	840	818	118	131	229	1	3	0 6	1 3	..	..	4,659	..	..
Arrowtown ..	390	410	136	98	100	1	0	..	..	1 0	..	2,316	..	..
Queenstown ..	923	690	274	175	714	1	0	..	0 6	0 6	..	4,832	..	..
Gore ..	1,150	2,354	540	610	1,317	1	0	..	..	..	..	16,294	..	..
Mataura ..	1,530	867	240	210	485	1	3	..	..	..	..	4,313	..	..
Winton ..	162	474	90	135	160	1	3	..	..	..	..	2,808	..	..
Invercargill ..	1,000	6,215	1,300	1,100	1,750	1	0	0 3	1 0	[13]	..	58,187	..	..
North Invercargill	326	925	195	245	319	1	0	..	1 8	..	..	3,932	..	..
South Invercargill	4,000	1,874	373	616	907	1	3	..	1 11	..	..	6,120	..	..
East Invercargill	121	939	182	215	215	1	3	..	0 9	..	..	4,080	..	..
Avenal ..	80	355	50	73	102	1	0	..	..	..	..	1,879	..	..
Gladstone ..	240	329	66	132	132	1	0	..	0 6	..	..	2,736	..	..
Campbelltown	2,000	1,350	325	400	616	1	3	..	..	..	..	8,869	..	..
Riverton ..	718	815	246	226	431	1	3	..	..	..	..	4,278	..	..

* 1898-99; no later return.

(1) Consumers only.
(2) 1s. Domestic, 6d. other.
(3) 2 per cent. less than maximum.
(4) 1s. 3d. per 1,000 galls. by meter.
(5) Lighting, 3d.; sanitary, 3d.
(6) On capital value, £341,620.
(7) 2½d. for interest, 6d. for gas interest.
(8) On annual value.
(9) On capital value, for charitable aid purposes.
(10) 2d. for charitable institutions.
(11) Special, ¼d.; Christchurch drainage rate, ¾d.; South Waimakariri River Board, $\frac{1}{14}$d.
(12) A charge of £1 per house per annum for water supplied, and by meter.
(13) Maximum under "Municipal Corporations Act, 1886."
(14) Under £12 10s., 10s.; under £300, 5 per cent.; over £300, 4 per cent.; land and buildings, 2½ per cent.
(15) 2½, 3½, 6, and 7 per cent. on rateable value.

COUNTIES, 1899–1900.

[NOTE.—For value of land and improvements see Section XVI.]

[The populations given are those ascertained by the census, 1901, although the other figures relate to the financial year, 1899-1900.]

Counties.	Area in Square Miles (including Boroughs).	Population.	Rates struck by County on Capital Rateable Value.	
			General.	Other.
Mangonui	934	2,274	¾d.	
Whangaroa	160	927	1d.	
Hokianga	972	1,767	2½d.	
Bay of Islands	826	2,587	1d.	
Hobson	688	4,813	1½d.	¾d. special.
Whangarei	928	6,380	¾d.	¾d. separate in outlying district.
Otamatea	364	2,721	¾d.	¾d. separate in three and ½d. in two outlying districts.
Rodney	566	3,678	¾d.	¾d. Hoteo Riding.
Waitemata	613	7,035	¾d.	½d. separate in four outlying districts, ¾d. in four; 5/16d. special in Mairetahi outlying district.
Eden	43	19,314	..	
Manukau	791	12,306	..	
Coromandel	403	4,169	1½d.	¾d. on Native lands.
Thames	494	5,043	1½d.	
Ohinemuri	478	9,978	⅝d.	¾d. special water-rate in water-rate district.
Piako	1,095	2,436	½d.	Special, ¼d. Patetere Riding, 1/10d. Patetere and Taotaoroa Ridings.
Waikato	591	3,183	¼d.	
Waipa	282	3,580	⅛d., ⅜d.	¾d. separate Mangapiko & Alexandra outlying districts.
Raglan	824	1,697	⅛d., ¼d.	¼d. hospital and charitable aid; ¼d. Karioi loan; 3/10d. Waingaro loan.
Kawhia	1,515	1,113	..	
West Taupo	1,594	287	..	
East Taupo	2,581	256	..	
Rotorua	984	1,307	..	
Tauranga	577	1,720	¾d.	¼d. special; special ¼d. Maketu, ⅛d. Waimapu, 1/11d. Katikati Ridings.
Whakatane	1,716	779	¾d.	
Opotiki	1,440	1,438		

Waiapu	1,121	711	¾d.	¾d. special Tokomaru-Tuakau.
Cook	1,950	6,393	¾d.	Various.
Clifton	1,518	2,535	1d.	
Taranaki	583	11,194	¾d.	1 1/16d. for Eltham Road loan (small portion of county only).
Stratford	784	5,081	½d., ⅝d., ¾d.	¾d. separate; special, various.
Hawera	438	8,347	¾d.	¼d. separate, Mangatoki Riding.
Patea	691	2,046	¾d.	1d. special Kapara loan, 1d. Omuoa loan; ¾d. separate Kapara Riding.
Waitotara	343	3,476	1d.	7/32d. 1¼d., 2 5/16d. special in special rating districts.
Wanganui	1,942	4,018	¾d.	⅛d., ⅜d. special, Long Acre; 7/16d. Denlair, 1 9/16d. Waikupa Subdivisions.
Rangitikei	852	7,570	¾d.	⅛d. separate Wangaehu and Maungahoe Ridings; special, various, in special rating districts.
Kiwitea	336	2,844	¾d.	Special and separate, various.
Oroua	397	6,778	..	
Pohangina	295	1,536	¾d.	½d., ¼d. separate; ⅛d., 1/14d., ⅝d., 1 5/16d., 1½d., 2d., 3d. special.
Manawatu	267	3,000	⅜d.	Separate, ¼d. Mount Stewart, Carnarvon, and Kawakawa, ⅜d. Campbell, ⅛d. Waitohi and Awahou, 7/16d. Sandon Ridings.
Horowhenua	591	4,654	½d., ⅝d., ¾d.	Special, various.
Wairoa	1,887	1,773	¾d.	1/20d. special on whole county.
Hawke's Bay	3,232	6,833	1 3/16d.	
Waipawa	1,154	9,495	⅞d., 1⅛d.	⅜d., ⅛d., 1 5/16d., 9/10d., 1d., and 0·529d.
Patangata	747	2,376	1⅛d.	
Pahiatua	302	3,600	⅜d.	Forty-four special, various.
Akitio	377	1,048	½d.	¼d. separate Akitio and Mataikona Ridings.
Wairarapa North	942	3,580	¼d., 5/11d., ⅜d.	5/16d., 7/16d., ½d. separate; special, various.
Eketahuna	166	2,332	1 5/16d.	9/10d. separate; special, various.
Mauriceville	123	1,127	3 3/16d.	Special rates over small areas.
Wairarapa South	1,281	5,419	..	⅛d. hospitals and charitable aid.
Hutt	590	7,171	¼d., ⅜d.	½d. separate,; ⅓d., ⅛d., ⅜d., 5/10d., ⅝d. special.
Sounds	573	946	..	
Marlborough	3,812	6,518	..	
Kaikoura	673	1,765	¾d.	
Collingwood	1,029	2,490	..	¼d. special.
Waimea	1,662	7,833	¾d.	⅛d. hospitals and charitable aid; 1/10d., 3/13d. special for loans.
Buller	1,818	4,868	1½d.	¾d. special; ⅜d. hospitals and charitable aid.

COUNTIES, 1899-1900—*continued.*

Counties.	Area in Square Miles (including Boroughs).	Population.	Rates struck by County.	
			General.	Other.
Inangahua	2,256	4,595	2¼d. 3½d.,	Two special, 5/16d., ½d. Reefton Town, 2½d. Boatman's irrigation district.
Grey	1,452	4,971	1½d.	⅜d. hospitals and charitable aid.
Westland	4,420	4,405	1½d.	
Amuri	2,362	1,142	½d.	¾d., 7/16d., 5/16d., special for interest on loans.
Cheviot	322	1,120	⅜d.	
Ashley	1,627	11,599	..	
Selwyn	2,597	30,787	..	⅛d. hospitals and charitable aid.
Akaroa	353	3,669	⅜d.	½d. special.
Ashburton	2,542	11,342	¼d.	⅛d. special.
Geraldine	949	5,991	¼d.	⅜d., 3/16d. special.
Levels	273	5,496	1d.	¼d. special, Seadown Water-race loan interest.
Mackenzie	2,537	1,642	⅜d.	
Waimate	1,343	5,653	1 1/16d.	5/16d., ⅜d., ⅜d., ⅜d., 1d., separate.
Waitaki	2,333	9,086	½d.	Separate, ⅛d. Otepopo, ¼d. Kakanui, 3/16d. Moeraki and Waiareka Ridings.
Waihemo	336	2,014	⅝d.	
Waikouaiti	318	4,082	¾d.	
Peninsula	37	2,561	..	
Taieri	930	7,179	¾d.	⅛d. hospitals and charitable aid on whole county.
Bruce	503	4,762	⅜d., ¾d.*	3/16d. hospitals and charitable aid; special, various.
Clutha	946	6,445	..	
Tuapeka	1,365	6,272	¾d.	
Maniototo	1,239	3,792	½d.	
Vincent	2,684	4,362	1d.	1½d., 2½d., special.
Lake	3,712	2,535	1d.	
Southland	3,852	22,583	¾d.	⅛d. H. and C.A.; ½d. special in special rating districts.
Wallace	3,404	7,989	¾d.	⅛d. H. and C.A.; ⅜d. separate in three ridings; 1/10d. special, part Waiau Riding.
Fiord	3,040	124	..	
Stewart Island	651	253	½d.	½d. hospitals and charitable aid.

* Outlying, ½d.; road districts, ⅜d.

Town Districts, 1899–1900.

Note.—For value of land and improvements see Statistical Volume for 1899, pp. 454-459.

[The populations given are those ascertained by the census, 1901, although the figures relate to the financial year, 1899–1900.]

Town Districts.	Population.	Number of			Amount of Rate levied in the Pound on the Capital (or Annual) Value of Property.
		Dwellings.	Ratepayers.	Rateable Properties.	
					s. d.
Kamo	260	66	80	109	0 0¾
Helensville	531	107	100	127	0 4 *
Papakura	286	74	154	202	0 0½
Te Awamutu	355	60	65	76	0 0¾
Kihikihi	222	61	97	137	0 0¾
Ngaruawahia	245	70	130	146	0 0¾
Rotorua(1)					
Opotiki	627	240	229	277	0 0½
Waitara (Raleigh)	765	160	253	460	0 0¾
Opunake	466	113	161	539	0 0¾
Inglewood	719	187	161	391	0 0¾(2)
Normanby	370	80	125	125	0 5 †
Manaia	447	70	152	341	0 0¾(3)
Waverley	416	106	108	107	0 0¾
Lethbridge (Turakina)	230	53	47	65	0 8 *
Bull's	501	120	123	169	1 0 *
Halcombe	336	99	153	730	1 0 *
Clyde (Wairoa)	623	130	160	296	0 0¾
Taradale	763	158	145	198	0 0¼
Ormondville	459	196	143	215	0 2⅝
Waipawa	669	160	134	194	0 1⅛†
Kaikora North	268	61	100	135	0 9
Featherston	629	115	150	190	0 0¾(4)
Johnsonville	502	104	105	..	0 0½
Havelock	316	96	96	148	0 1
Amberley	417	92	80	130	0 0¾
Southbridge	396	125	250	..	0 0¾
Hampstead	1,118	250	270	320	..
Tinwald	561	..	152	223	0 0⅝
Geraldine	868	195	200	312	0 0¾
Greytown (Allanton)	227	106	74	114	0 0¾
Outram	420	94	69	69	0 0½(5)
Clinton	431	88	121	132	0 6 *
Wyndham	417	104	105	354	1 0 *
Otautau	443	98	114	156	0 0¾

(1) Special town district under "The Thermal-Springs Districts Act, 1881." (2) Special rate, ⅛d. (3) County rate, ¼d. (4) Special rate, ⅛d. (5) Water-rate, 7 per cent. where supplied.

* On the annual value. † On the unimproved value.

Road Districts, 1899–1900.

Note.—For value of land and improvements see Statistical Volume for 1899, pp. 454–459.

[The populations given are those ascertained by the census, 1901, although the figures relate to the financial year, 1899-1900.]

County and District.	Population.	Number of			Amount of Rate levied in the Pound on the Capital Value.
		Dwellings.	Ratepayers.	Rateable Properties.	
					d.
Whangaroa Bay of Islands Hokianga Hobson — (No road districts.)					
Whangarei—					
Hikurangi	495	120	90	130	‡
Kaurihohore	191	32	55	62	‡
Kensington	49	16	26	31	‡
Maungakaramea	288	52	102	102	‡
Maunu	584	142	121	133	‡
Otonga	300	52	57	59	‡
Otonga East	274	68	81	109	‡
Parua Bay	215	150	200	255	‡
Ruarangi	103	22	59	69	‡
Waikiekie	205	36	233	233	‡
Waipu North	224	46	75	81	‡
Whareroa	92	63	62	78	‡
Otamatea—					
Mangawai	268	55	88	88	‡
Matakohe	423	70	159	227	‡
Whakapirau (no Board)	264				
Rodney—					
Albertland North	65	11	45	45	‡
Albertland South	322	75	167	234	‡
Ahuroa	41	12	58	69	‡
Komokoriki	62	16	46	49	‡
Mahurangi East	151	34	74	74	‡
Mahurangi Upper	947	190	340	380	‡
Mainene	74	11	33	43	‡
Matakana East	132	17	33	33	‡
Matakana West	172	61	67	150	‡
Omaha	357	87	158	202	‡
Puhoi	596	93	139	249	‡
Tauhoa	371	71	91	..	‡
Wharehine	96	20	32	35	‡
Waitemata—					
Kaukapakapa	543	100	190	316	‡
Pukeatua	560	..	218	277	‡
Whangaparaoa	66	22	29	42	‡

Road Districts, 1899–1900—*continued.*

County and District.	Population.	Number of			Amount of Rate levied in the Pound on the Capital Value.
		Dwellings.	Ratepayers.	Rateable Properties.	
					d.
Eden—					
Avondale	1,075	214	340	..	¾
Arch Hill	1,671	360	285	580	1s.(1)
Eden Terrace	2,011	414	311	438	¾(2)
Epsom	750	130	125	140	¾
Mount Albert	2,085	305	440	549	¾
Mount Eden	5,129	980	875	1,054	¾(3)
Mount Roskill (1899)	581	91	160	238	¾
Mount Wellington	954	180	220	576	¾
One-tree Hill	1,283	174	166	243	½
Panmure Township	259	70	72	90	½
Point Chevalier	684	32	32	44	½
Remuera	2,186	425	395	515	¾
Tamaki West	375	98	108	130	⅝
Manukau—					
Awhitu	413	100	118	147	¾
Howick Town	224	70	115	132	¾
Hunua	266	50	246	..	¾
Karaka	188	48	155	225	¾
Mangare	702	200	157	203	½
Manurewa	260	58	82	122	¾
Maraetai	82	24	28	36	¾
Mauku	380	94	143	208	½(4)
Maungatawhiri	378	45	62	95	½
Mercer Township	229	42	58	75	¾
Opaheke	369	80	106	281	¾
Drury	382	97	162	211	¾
Otahuhu	1,211	316	275	349	¾
Pakuranga	271	66	70	94	½
Papakura	373	70	95	100	¾
Paparata	373	85	112	162	¾
Paparoa	166	40	70	93	¾
Papatoitoi	176	37	37	47	½
Pokeno	398	75	92	122	¾(5)
Pollok Settlement	88	20	37	46	¾
Pukekohe East	942	202	234	..	¾
Pukekohe West	1,153	216	240	240	¾
Tamaki East	580	113	118	136	¾
Turanga	227	42	67	75	¾(6)
Waipipi	905	200	260	300	¾(7)
Wairoa	792	200	200	304	¾
Waiuku	492	184	209	220	¾
Coromandel, Thames, Ohinemuri	(No road districts.)				

(1) On annual value; ½d. special. (2) ½d. special. (3) ⅜d. special. (4) $\frac{5}{16}$d. and ½d. special. (5) ¼d. special. (6) ¼d. separate. (7) ½d. special on part of district.

ROAD DISTRICTS, 1899-1900—*continued.*

County and District.	Population.	Number of			Amount of Rate levied in the Pound on the Capital Value.
		Dwellings.	Ratepayers.	Rateable Properties.	
					d.
Piako—					
Matamata	262	40	39	52	½
Waitoa	1,322	272	251	351	½
Waikato—					
Cambridge	562	95	123	123	¼
Kirikiriroa	964	150	251	251	¼
Tamahere	248	25	52	52	¼
Whangamarino	443	77	206	419	¼
Huntly	966	..	196	196	¾
Waipa—					
Newcastle	391	88	155	134	¾
Pukekura	810	190	378	386	¼
Rangiaohia	507	85	111	120	¼
Tuhikaramea	98	20	43	43	¼
Raglan—					
Karamu (no Board)	78	..	..	..	..
Onewhero	197	44	60	61	..(1)
Te Akau (no Board)	32	..	..	..	..
Kawhia West Taupo East Taupo Rotorua } (No road districts.)					
Tauranga—					
Katikati	409	73	140	251	¾
Te Puke	477	130	171	171	¾
Te Puna	169	38	140	148	..(1)
Whakatane (no road districts).					
Opotiki—					
Opotiki	600	120	240	..	½
Waiapu. (No road districts.)					
Cook—					
Aroha	58	6	9	7	(1)
Kaiti	700	120	150	220	¾(2)
Ngatapa	489	107	88	97	(1)
Ormond	482	105	105	159	½
Patutahi	638	88	112	266	¼(3)
Pouawa	85	45	75	110	(4)
Poverty Bay	1,050	109	121	121	½(5)

(1) No rate struck. (2) ¼d. special; ½d. and ¾d. separate. (3) 7/10d. special. (4) Special, various. (5) 1/10d. special.

ROAD DISTRICTS, 1899-1900—*continued.*

County and District.	Population.	Number of			Amount of Rate levied in the Pound on the Capital Value.
		Dwellings.	Ratepayers.	Rateable Properties.	
					d.
Cook—*continued.*					
Taruheru	225	45	53	53	(1)
Te Arai	294	84	57	188	½(2)
Titirangi	44	10	19	30	½(2)
Waikohu	328	30	58	85	(1)
Waimata	264	47	47	50	(1)
Waipaoa	80	9	7	10	(1)
Whataupoko	1,148	200	260	300	¾(3)
Clifton. (No road districts.)					
Taranaki—					
Barrett	439	78	90	118	½
Carrington	341	58	81	81	½(4)
Egmont	635	100	155	155	½(5)
Elliot	235	40	49	55	½
Frankley	231	58	68	68	½
Henui	393	78	101	..	½
Hurford, Upper	56	16	17	17	½
Mangorei	276	54	69	74	½
Moa	2,836	450	500	550	¾(6)
Oakura	333	100	99	522	½
Okato	345	60	78	125	½
Omata	294	62	54	78	½
Parihaka	1,514	251	336	765	½
Tataraimaka	152	25	37	38	½
Waitara West	814	169	169	475	½
Waiwakaiho	350	73	101	183	½
Stratford—					
Manganui	1,734	340	348	680	¾(7)
Hawera—					
Waimate	2,619	470	510	696	¾(8)
Patea—					
Kohi	106	32	30	30	(1)
Motoroa	60	17	20	20	(1)
Okotuku	134	24	29	33	(1)
Patea East	401	67	85	355	(1)
Patea West	777	175	190	630	½(2)
Wairoa	105	22	30	30	(1)
Waitotara-Momohaki	496	115	116	357	(1)
Whenuakura-Waitotara	318	40	42	42	(1)
Waitotara. (No road districts).					

(1) No rate struck. (2) Special. (3) ¼d. special. (4) ¼d. special. (5) ¼d., ¼d., and ¼d special. (6) ¼d. special. (7) Special, various (8) Separate, various.

Road Districts, 1899–1900—*continued.*

County and District.	Population.	Number of Dwellings.	Number of Ratepayers.	Number of Rateable Properties.	Amount of Rate levied in the pound on the Capital Value.
					d.
Wanganui—					
Kaukatea	198	50	46	108	⅜
Kaitoke	606	98	110	174	½
Mangawhero	973	300	450	470	½
Purua	904	150	144	182	½
Wangaehu Upper (1899)	695	90	103	308	½(1)
Rangitikei. (No road districts.)					
Oroua—					
Fitzherbert	724	133	279	374	⅜
Manawatu	2,405	425	468	803	½
Manchester	3,313	750	667	2,030	⅝(2)
Pohangina, Kiwitea, Manawatu (No road districts.)					
Horowhenua—					
Otaki	1,280	263	302	1,171	⅝(1)
Te Horo	512	97	133	509	½
Wirokino	2,862	885	700	1,030	⅝(1)
Wairoa, Hawke's Bay (No road districts.)					
Waipawa—					
Kumeroa	334	100	120	238	½(3)
Maungaatua	244	..	53	191	1
Norsewood	1,206	181	257	270	1½
Ruataniwha North	651	80	94	103	⅜
Takapau	608	100	63	93	⅜
Waipawa	274	58	65	78	½
Waipukurau	741	..	110	149	½
Woodville	817	180	230	307	1⅛
Patangata—					
Oero	305	34	49	49	½
Patangata	294	46	52	99	½
Porangahau	433	80	70	149	½
Taumumu	185	18	18	18	½
Wallingford	192	25	25	56	½
Wanstead	143	54	54	74	(3)
Weber	556	82	125	158	½
Pahiatua. (No road districts.)					

(1) Special, various. (2) ⅝d. special; separate, various. (3) No rate struck.

Road Districts, 1899–1900—*continued.*

County and District.	Population.	Number of Dwellings.	Number of Ratepayers.	Number of Rateable Properties.	Amount of Rate levied in the Pound on the Capital Value.
Wairarapa North—					d.
Castlepoint	..	82	85	93	$\frac{9}{16}$ (1)
Masterton	..	380	350	438	$\frac{5}{16}$ (2)
Mauriceville	..	264	259	358	$\frac{3}{16}$
Taueru Upper	..	46	49	54	$\frac{5}{16}$ (3)
Akitio. (No road districts.)					
Eketahuna. (No road districts.)					
Wairarapa South—					
Featherston	..	2,267	450	400	600	$\frac{1}{2}$
Taratahi-Carterton	..	2,523	550	473	632	1d. & $\frac{5}{16}$ (2)
Hutt—					
Makara	..	257	38	43	60	$\frac{1}{4}$ (4)
Seatoun	..	432	110	114	114	$\frac{1}{2}$
Plimmerton	..	84	25	43	50	$\frac{1}{2}$
Sounds. (No road districts.)					
Marlborough—					
Awatere	..	785	120	91	132	$\frac{1}{2}$
Omaka	..	1,603	260	349	447	$\frac{1}{2}$
Pelorus	..	1,218	240	260	269	$\frac{1}{2}$ (5)
Picton	..	847	184	159	252	$\frac{1}{2}$
Spring Creek	..	819	123	153	177	$\frac{1}{2}$
Wairau	..	930	159	139	225	$\frac{1}{2}$
Kaikoura. (No road districts.)					
Collingwood—					
Collingwood	..	1,078	330	305	536	$\frac{1}{2}$
Takaka	..	1,342	330	338	779	$\frac{1}{2}$
Waimea—					
Dovedale	..	286	48	73	73	$\frac{1}{2}$
Motueka	..	..	190	180	195	(6)
Moutere Upper	..	397	110	110	..	(6)
Riwaka	..	687	150	..	..	(6)
Stoke	..	1,183	..	210	..	(6)
Suburban North	..	559	120	..	..	(6)
Waimea West	..	460	72	84	87	(6)

(1) $\frac{1}{20}$d. special. (2) Special, various. (3) $\frac{5}{16}$d., $2\frac{1}{8}$d., and $\frac{1}{16}$d. special.
(4) $\frac{1}{4}$d. special (5) $\frac{1}{2}$d. special. (6) No rate struck.

Road Districts, 1899–1900—*continued.*

County and District.	Population.	Number of Dwellings.	Number of Ratepayers.	Number of Rateable Properties.	Amount of Rate levied in the Pound on the Capital Value.
Buller Inangahua Grey Westland Amuri	(No road districts.)				
Cheviot (no Board).					d.
Ashley—					
Ashley	726	150	190	276	$\frac{3}{4}$
Cust	713	157	150	190	$\frac{3}{4}$
Eyreton	1,566	320	274	274	$\frac{3}{4}$
Eyreton West	401	85	77	77	$\frac{1}{2}$
Kowai	1,851	..	..	740	$\frac{1}{2}$
Mandeville and Rangiora	2,257	523	424	592	$\frac{1}{2}$
Oxford	1,973	461	473	682	$\frac{3}{4}$
Waipara	1,695	300	280	495	$\frac{3}{4}$
Selwyn—					
Avon	3,889	1110	814	1,070	1s.(1)
Courtenay	2,560	419	479	754	$\frac{3}{4}$
Ellesmere	3,497	..	592	858	$\frac{1}{16}$
Halswell	1,278	225	215	239	$\frac{3}{4}$
Heathcote	2,995	501	773	823	$\frac{23}{40}$(2)
Lake Coleridge	177	30	34	84	(3)
Lincoln	1,213	370	248	317	$\frac{1}{2}$(4)
Malvern	965	162	165	298	$\frac{1}{2}$
Malvern East	625	137	165	283	$\frac{1}{4}$
Malvern South	428	83	206	334	$\frac{1}{4}$
Rakaia	825	198	196	333	$\frac{1}{4}$
Riccarton	5,713	970	1,050	1,294	$\frac{9}{176}$
Spreydon	1,457	281	334	390	$\frac{3}{4}$
Springs	1,872	460	405	520	$\frac{1}{2}$(5)
Taitapu	324	80	67	73	(6)
Templeton	2,338	454	496	672	$\frac{7}{18}$(5)
Waimakariri Upper	235	21	18	41	$\frac{1}{2}$
Akaroa—					
Akaroa and Wainui	1,308	230	256	360	$\frac{9}{176}$
Le Bon's Bay	316	59	85	85	$\frac{7}{176}$(7)
Little River	816	260	160	150	(8)
Okain's Bay	520	103	97	130	$\frac{3}{4}$(7)
Pigeon Bay	258	57	53	66	$\frac{3}{4}$
Port Levy	159	21	48	58	$\frac{1}{2}$
Port Victoria	292	53	56	56	$\frac{3}{4}$
Ashburton—					
Anama	72	14	20	22	$\frac{1}{3}$

(1) On the annual value; separate, various. (2) $\frac{1}{8}$d. special; $\frac{3}{4}$d. and $\frac{4}{64}$d. separate.
(3) No rate struck. (4) $\frac{1}{4}$d. special; $\frac{1}{8}$ separate. (5) $\frac{4}{64}$d. separate. (6) $\frac{5}{64}$d. separate.
(7) $\frac{1}{4}$d. special. (8) $\frac{1}{2}$d. special.

Road Districts, 1899–1900—*continued.*

County and District.	Population.	Number of			Amount of Rate levied in the Pound on the Capital Value.
		Dwellings.	Ratepayers.	Rateable Properties.	
					d.
Ashburton—*continued.*					
Ashburton Upper	2,002	370	500	674	
Coldstream	319	61	70	88	
Longbeach	1,335	..	245	..	
Mount Hutt	1,500	265	280	390	
Mount Somers	928	188	230	230	
Rangitata	797	161	218	291	
South Rakaia	1,480	320	340	486	
Wakanui	1,230	203	284	324	
Geraldine—					
Geraldine	2,250	425	515	805	
Mount Peel	493	92	188	103	
Temuka	2,380	420	505	..	
Levels, Mackenzie, Waimate, Waitaki, Waihemo, Waikouaiti (No road districts.)					
Peninsula—					
Otago Heads	804	48	97	122	
Peninsula	1,324	219	333	393	
Portobello	796	..	339	363	
Tomahawk	137	28	34	44	
Taieri. (No road districts.)					
Bruce—					
Balmoral	476	54	65	84	(1)
Inch-Clutha (Road and River) ..	344	64	64	75	
Mount Stuart	618	105	118	127	
Clutha, Tuapeka, Maniototo, Vincent, Lake (No road districts.)					
Southland—					
Invercargill (no Board)	1,441	..	..	..	..
Knapdale	1,596	290	313	393	
Oteramika	2,249	365	460	460	(2)
Tuturau	733	99	105	153	
Wallace, Fiord, Stewart Island (No road districts.)					

(1) No rate struck. (2) ½d. separate.

SECTION VII.—LICENSES AND LICENSED HOUSES, ETC.

LICENSES AND LICENSED HOUSES.

DURING the year ended the 31st March, 1900, 2,314 licenses for the sale of intoxicating liquors were granted. Of these, 1,526 were publicans' and accommodation licenses, 8 New Zealand wine, 65 packet, 142 wholesale, and 573 conditional licenses. The fees paid amounted to £53,004, and formed part of the revenue of the local governing bodies of the districts in which the licenses were issued. Particulars are given in the following table:—

NUMBER OF LICENSES GRANTED DURING THE YEAR 1899-1900, AND THE AMOUNT OF FEES PAID TO LOCAL BODIES THEREFOR.

Licenses.	In Counties.	In Boroughs.	Total.
Publicans' licenses	608	690	1,298
Accommodation licenses	228	..	228
Total licensed houses	836	690	1,526
New Zealand wine licenses	..	8	8
Packet licenses	13	52	65
Wholesale licenses	9	133	142
Conditional licenses	441	132	573
Total licenses granted	1,299	1,015	2,314
Amount of license-fees paid to local bodies	£19,485	£33,519	£53,004

The average number of persons to each licensed house in counties and boroughs respectively, for 1899-90, is next shown:—

	Number of Licensed Houses.*	Estimated Population.	Average Number of Persons to each Licensed House.
Counties	836	402,554	482
Boroughs	690	351,731	510
Totals	1,526	754,285†	494

In 1898-99 the number of licensed houses in counties was 847, and those in boroughs 677, giving a total of 1,524 houses, or 2 less than in 1899-1900. The average number of persons to a house increased from 473 in 1898-99 to 482 in 1899-1900 in counties, and in boroughs the average increased from 505 to 510.

* *I.e.*, houses holding publicans' or accommodation licenses.
† Excluding persons on shipboard and adjacent islands.

The annual fees paid for licenses are—

	£
(1.) For a publicans' license	
(*a.*) Within the limits of a borough or town district ..	40*
(*b.*) Outside the aforesaid limits	25
2.) For a New Zealand wine license	1
3.) For an accommodation license, a sum to be determined by the Licensing Committee, not exceeding	20
(4.) For a packet license—	
(*a.*) For a vessel exceeding 50 tons register..	10
(*b.*) For a vessel not exceeding 50 tons register	5
(5.) For a wholesale license	20
(6.) For a conditional license, according to duration of license, a sum not exceeding	30

The approximate capital value of the licensed houses in the counties was stated at £740,914, and the same for certain of the boroughs at £213,224. There was, besides, an annual value of £120,059 for other licensed houses in the boroughs, which, capitalised at 6 per cent., would represent £2,000,983. The capital value of all licensed houses would therefore be about £2,955,121.

The total number of persons engaged in or connected with the sale or manufacture of wine, spirits, beer, cordials, &c., was returned at the census of 1896 as under :—

	Males.	Females.	Persons
Hotelkeeper	1,334	204	1,538
Relative assisting	157	348	505
Manager, clerk	67	11	78
Hotel, club, &c., servant	1,136	2,075	3,211
Manager, secretary, steward of club-house	32	3	35
Barman, barmaid	196	210	406
Wine, spirit, ale merchant	43	..	43
Assistant	5	1	6
Clerk, book-keeper, accountant, traveller, storeman	44	..	44
Cordial, &c., merchant, salesman ..	5	..	5
Brewer, bottler	234	4	238
Manager, clerk, traveller	53	..	53
Relative assisting, apprentice ..	18	..	18
Cellarman, assistant, carter, &c. .	151	1	152
Maltster and assistants	118	..	118
Distiller, bottler	2	..	2
Wine-maker, -bottler	9	..	9
Cordial, &c., maker	293	6	299
Clerk, book-keeper, traveller ..	6	..	6
Totals	3,903	2,863	6,766

* Between the hours of six in the morning and ten at night. For an eleven o'clo license an additional £5 must be paid.

Remarks on the high rate of mortality ruling amongst men connected with the liquor trade in respect of various diseases, as compared with the death-rate of males engaged in other occupations, will be found in Section XII., dealing with vital statistics.

Local Option Poll.

Under "The Alcoholic Liquors Sale Control Act, 1893," each electoral district constituted for the election of a member of the House of Representatives is a licensing district, and electors for the House of Representatives are also electors under the Licensing Acts.

Under the Amendment Act of 1895 the licensing poll is taken at the same time as the general election of members of the House of Representatives. The questions for the decision of the voters are,—

(1.) Whether the number of licenses existing in the district shall continue?
(2.) Whether the number shall be reduced?
(3.) Whether any licenses whatever shall be granted?

The voter may vote for one or two of these proposals, but no more.

The method of determining the result of the poll in each district by the Returning Officer is as follows:—

(1.) If the number of votes recorded in favour of the continuance of existing licenses is an absolute majority of all the voters whose votes were recorded, the proposal is to be deemed to be carried, and the licenses continue until the next poll, subject to certain provisions in special cases.

(2.) If the number of votes recorded in favour of a reduction in the number of licenses is an absolute majority of all the voters whose votes were recorded, the proposal is deemed to be carried, and supersedes the proposal for continuance of licenses. The Licensing Committee then reduces publicans' licenses by not less than 5 per cent. or more than 25 per cent. of the total number existing, excluding forfeitures. Provision is made that when a reduction vote is carried the licenses shall be reduced by one at least when the total number does not exceed ten, two when not over twenty, and three at least when the licenses exceed thirty.

(3.) If the number of votes recorded in favour of the proposal that no license shall be granted is not less than three-fifths of all the voters whose votes were recorded, the proposal is declared to be carried, and supersedes the proposal for reduction and for continuance, and no licenses can be granted.

(4.) If none of the proposals respecting licenses are carried by the prescribed majority the licenses continue as they are until next poll, subject to certain provisions in special cases.

The result of the poll taken on 6th December, 1899, for each licensing district is as follows:—

RESULT OF LICENSING POLL, 1899.

District.	Number on Roll.	For Continuance.	For Reduction.	For No License.	Total Number of Persons who voted at Poll.			Informal Votes.	Result of Poll.
					Men.	Women.	Total.		
Bay of Islands	5,539	2,381	992	1,195	2,652	1,276	3,928	41	Continuance carried.
Marsden	5,541	2,029	1,227	1,517	2,398	1,313	3,711	..	"
Waitemata	4,876	1,943	1,018	1,184	2,116	1,188	3,304	63	"
Eden	5,538	2,278	2,027	1,919	2,421	2,134	4,555	160	"
City of Auckland.. ..	18,336	6,916	6,263	5,869	7,187	6,519	13,706	400	"
Parnell	6,079	2,372	1,903	1,724	2,198	2,376	4,574	107	"
Manukau	5,338	1,952	1,711	1,492	2,082	1,853	3,935	..	No proposal carried.
Franklin	4,796	1,662	1,535	1,635	2,177	1,581	3,758	167	"
Thames	6,236	2,153	2,056	2,374	2,764	1,986	4,750	144	"
Ohinemuri	7,873	2,289	2,175	3,127	3,731	1,898	5,629	141	"
Waikato	5,242	2,737	1,234	1,445	2,533	1,850	4,383	164	Continuance carried.
Bay of Plenty	4,786	2,294	1,099	1,403	2,371	1,626	3,997	236	"
Waiapu	6,106	2,417	1,941	2,562	3,222	1,799	5,021	..	No proposal carried.
Hawke's Bay	4,869	96	539	629	376	384	760	18	Poll invalid.
Napier	4,931	1,933	1,798	1,685	2,084	1,929	4,013	211	No proposal carried.
Waipawa	4,906	2,147	1,363	1,741	2,606	1,548	4,154	217	Continuance carried.
Pahiatua	4,501	1,909	1,305	1,713	2,368	1,425	3,793	8	"
Masterton	5,172	1,853	1,676	2,001	2,349	1,531	3,880	..	No proposal carried.
Wairarapa	4,674	2,021	1,286	1,558	2,411	1,509	3,920	..	Continuance carried.
Egmont	5,325	2,135	1,670	1,977	2,880	1,409	4,289	136	No proposal carried.
Taranaki	5,679	2,624	1,696	1,872	2,623	2,137	4,760	63	Continuance carried.
Hawera	5,192	1,981	1,573	1,874	2,494	1,635	4,129	212	No proposal carried.
Patea	4,847	1,932	1,091	1,462	2,305	1,318	3,623	..	Continuance carried.
Wanganui	6,401	2,795	1,731	2,162	2,781	2,426	5,207	152	"
Rangitikei	5,609	1,911	1,047	1,621	2,564	1,211	3,775	155	"
Palmerston	5,350	2,139	1,321	1,582	2,268	1,787	4,055	166	"
Manawatu	4,502	1,670	1,161	1,448	2,194	1,204	3,398	164	"
Otaki	4,234	1,903	942	987	2,068	1,303	3,371	..	"
Suburbs of Wellington ..	6,126	1,939	1,860	2,120	3,179	2,947	6,126	246	No proposal carried.
City of Wellington ..	18,874	7,578	6,447	6,194	8,489	7,079	15,568	837	Continuance carried.
City of Nelson	5,368	2,594	1,663	1,348	2,222	2,291	4,513	109	"
Motueka	4,286	1,915	681	864	1,852*	1,142*	2,994	148	"

*Approximate.

RESULT OF LICENSING POLL, 1899—*continued.*

District,	Number on Roll.	For Continuance.	For Reduction.	For No License.	Total number of Persons who voted at Poll.			Informal Votes.	Result of Poll.
					Men.	Women.	Total.		
Wairau	5,478	2,553	1,264	1,356	2,529	1,713	4,242	..	Continuance carried.
Buller	5,862	2,798	1,794	1,948	3,226	1,947	5,173	271	"
Grey	5,723	2,771	1,400	1,448	2,855	1,718	4,573	..	"
Westland	4,427	1,160	432	497	1,126	693	1,819	..	Poll invalid.
Ashley	4,469	1,715	995	1,287	1,983	1,171	3,154	75	Continuance carried.
Kaiapoi	4,796	1,717	1,949	2,235	2,166	1,908	4,074	81	No proposal carried.
Avon	4,893	2,188	1,504	1,592	2,062	1,968	4,030	126	Continuance carried.
City of Christchurch ..	20,750	8,889	6,383	6,538	7,698	7,955	15,653	..	"
Lyttelton	4,841	2,032	1,292	1,444	1,993	1,649	3,642	74	"
Riccarton	4,585	1,973	1,304	1,347	2,017	1,742	3,759	..	"
Ellesmere	4,121	1,761	1,268	1,502	1,966	1,452	3,418	..	"
Selwyn	4,480	1,684	1,262	1,464	2,133	1,275	3,408	51	"
Ashburton	5,228	1,901	1,726	2,022	2,564	1,681	4,245	45	No proposal carried.
Geraldine	4,343	1,882	1,114	1,490	2,107	1,545	3,652	115	Continuance carried.
Timaru	5,018	1,985	1,869	1,921	2,158	1,825	3,983	..	No proposal carried.
Waitaki	4,529	1,799	1,196	1,519	2,156	1,202	3,358	..	Continuance carried.
Oamaru	4,881	1,768	1,898	1,975	2,104	1,803	3,907	..	Reduction carried.*
Waihemo	4,430	84	798	885	524	479	1,003	28	Poll invalid.
Waikouaiti	4,257	1 454	1,294	1,495	1,699	1,467	3,166	52	No proposal carried.
City of Dunedin	20,084	6,864	6,944	6,774	7,786	7,775	15,561	..	"
Caversham	6,151	2,351	1,974	1,986	2,330	2,338	4,668	56	Continuance carried.
Taieri	4,521	1,603	1,560	1,606	1,979	1,466	3,445	142	No proposal carried.
Bruce	4,665	..	..	..	..	..	..	..	Declared no election.
Tuapeka	4,720	1,825	1,143	1,331	2,175	1,164	3,339	144	Continuance carried.
Clutha	4,925	1,393	1,889	2,170	2,235	1,517	3,752	144	No license carried.
Mataura	5,186	1,775	1,859	2,192	2,478	1,695	4,173	101	No proposal carried.
Wakatipu	4,765	2,092	1,052	1,202	2,387	1,274	3,661	..	"
Wallace	4,578	2,052	1,081	1,305	2,356	1,217	3,573	118	Continuance carried.
Invercargill	5,804	2,228	2,172	2,300	2,335	2,303	4,638	120	No proposal carried.
Awarua	4,062	1,618	1,304	1,460	1,867	1,307	3,174	86	Continuance carried.
	373,744	142,443	107,751	118,575	160,959	120,863	281,822	..	

* Poll declared void on petition.

It will thus be seen that 142,443 votes were recorded in favour of continuance of existing licenses, 107,751 for reduction, and 118,575 for no license. In thirty-seven districts the majority of voters were in favour of continuance; in nineteen districts none of the proposals were carried; in three, the poll was declared invalid; in one, reduction was carried, but on petition the poll was declared void; in one, legal proceedings were pending at the date the foregoing return was made up, but since then "no election" has been declared as the result of the poll; and in one (Clutha) a sufficient majority of voters polled for no license. In twelve of the districts, excluding Hawke's Bay and Waihemo, where the poll was invalid—namely, Thames, Ohinemuri, Waiapu, Masterton, Suburbs of Wellington, Kaiapoi, Ashburton, Oamaru, Waikouaiti, Taieri, Mataura, and Invercargill—a majority of those who polled voted for prohibition, but not the necessary three-fifths required to carry that issue.

Of the total number of persons (281,822) who voted at the poll, 160,959, or 57·11 per cent., were men, and 120,863, or 42·89 per cent., women.

Fire Brigades

On the 31st December, 1900, there were ninety-one fire brigades in the colony, with a total strength of 1,433 (260 officers and 1,173 men). Compared with the numbers in 1899, these figures show an increase of three brigades, 19 officers, but a decrease of 179 men. There is also a salvage corps in Auckland, consisting of one captain and six men, not included in the figures given above, which works in conjunction with the city and suburban fire brigades.

SECTION VIII.—ACCUMULATION: PRICES AND WAGES

Banks of Issue.

In December, 1900, five banks of issue were doing business in New Zealand, the Bank of New Zealand and the Colonial Bank having amalgamated in 1895. Two of the five banks, the Bank of New Zealand and the National Bank of New Zealand (Limited), were wholly New Zealand institutions, with a paid-up capital of £750,000, besides which the Bank of New Zealand has £2,000,000 of 4 per cent. stock guaranteed by the Government of the colony. The total average liabilities of all five banks for the year 1900 in respect of New Zealand transactions were £16,964,582, and the average assets £17,314,535. The average amount on deposit during the year was £15,570,610, of which sum £777,381 belonged to the General Government. Excluding those belonging to Government, deposits to the value of £7,926,853 were bearing interest, and £6,866,376 at call. The value of the notes in circulation of these banks was £1,299,826.

The development of banking in New Zealand since the year 1857 has been very great. Taking for each year the average of the four quarters' returns made by the banks of issue, the figures for 1857, 1870, 1880, 1890, and 1900 are :—

Year.	Deposits. £	Assets. £	Liabilities. £
1857	343,316	419,860	432,494
1870	3,127,769	6,315,354	3,819,670
1880	8,538,935	14,220,275	9,550,177
1890	12,368,610	17,735,259	13,356,598
1900	15,570,610	17,314,535	16,964,582

In 1880 the deposits of these banks were £18·00 per head of the mean population. In 1890 they were £19·92 per head; and in 1900, £20·39. The ratio of advances to deposits, which was 132·34 per cent. in 1880, reached its maximum in 1883, when it stood at 173·35 per cent. The proportion since that year fell, till in 1897 it was only 76·21 per cent. In 1898, however, the ratio had advanced to 80·52 per cent., and in 1899 still further, to 80·92 per cent., but in 1900 there was again a decline, the proportion for that year being 77·61 per cent.

The following figures, which are taken from the published returns for the December quarter of each year, show that the value

of the coin and bullion held by all the banks of issue doing business in New Zealand rose steadily from 1891 to 1895, in which year the value stood at £3,333,272. Since that date the value gradually decreased year by year to £2,636,177 in December quarter, 1899, but rose again to £2,802,232 in December, 1900 :—

Quarter ended 31st December.	Coin.	Gold and Silver in Bullion or Bars.	Total Coin and Bullion.
	£	£	£
1890	2,421,530	169,659	2,591,189
1891	2,231,242	126,346	2,357,588
1892	2,381,319	141,406	2,522,725
1893	2,480,453	121,496	2,601,949
1894	3,103,355	118,121	3,221,476
1895	3,199,889	133,383	3,333,272
1896	3,171,702	122,901	3,294,603
1897	2,848,183	107,635	2,955,818
1898	2,625,896	126,349	2,752,245
1899	2,511,102	125,075	2,636,177
1900	2,658,207	144,025	2,802,232

The figures shown for each quarter of the year 1900 are :—

	Coin. £	Bullion. £
March quarter, 1900	2,539,445	137,434
June "	2,613,773	121,262
September "	2,623,523	119,119
December "	2,658,207	144,025

In 1886 the average amount of advances made by the banks was £15,853,420, equal to £27·23 per head of the mean population. The advances gradually declined in amount and proportion to population until 1891, when they were in value £11,549,145, or £18·34 per head. During the years 1892 and 1893, however, there was a rise, but in 1894 a fall to £12,031,537 (£17·71 per head), and in 1897 to £10,892,111, or £15·09 per head, which is the lowest average since the year 1872. In 1898 an increase both in the average amount of advances and in the rate per head of population (£11,387,321 and £15·47 respectively) was observed ; in 1899 there was a further increase to £11,806,859, or £15·74 per head ; and in 1900 to £12,084,744, or £15·83 per head. The discounts in 1900 amounted to £1,730,809, or £2·27 per head of mean population. The largest amount of discounts in any year was £6,061,959 in 1879, a rate of £13·53 per head. From 1879 there was a fall year by year until 1896, when the sum was £1,756,791, or £2·49 per head. In 1897 they totalled £1,768,845, but, with a comparatively larger population, the rate per head was only £2·45. In 1898 the amount fell to £1,719,715, and the rate per head to £2·34. In 1899 there was a further decline in the amount to £1,692,201, and in the rate per head to £2·26, but in 1900 a slight rise as shown above.

The deposits, as stated in the returns for the March quarters of the years 1900 and 1901, were:—

	£
Deposits not bearing interest, March quarter, 1900	6,689,583
" " " March quarter, 1901	6,929,370
An increase of	£239,787

in the amount held at call. The fixed deposits show a similar movement, but of greater magnitude:—

	£
Deposits bearing interest, March quarter, 1900 ..	7,801,601
" " March quarter, 1901 ..	8,196,351
An increase of	£394,750

Besides the above, the Government had with the Bank of New Zealand £770,504 on deposit in March, 1901, as against £874,258 in March, 1900.

Special Banking Legislation.

An Act was passed in 1893 intituled "The Banks and Bankers Act Amendment Act," under which, notwithstanding anything in previous legislation, the shareholders or proprietors of any bank may, from time to time, by extraordinary resolution, authorise its capital to be increased to such an amount and upon such terms as are deemed by them to be expedient. The holders of shares in such increased capital may be granted special privileges notwithstanding anything contained in the charter of the bank.

Any increased capital may be raised by the issue of new shares of such amount as is determined on by extraordinary resolution of the shareholders or proprietors.

The Bank-note Issue Act of the same year provides that notes issued or circulated in the colony by any bank shall, to the amount of the authorised issue, be a first charge on all the assets and property (including the paid-up capital, uncalled capital, and reserve fund—"Banking Act, 1894") of such bank, and that the notes shall be payable in gold only at the office of the bank at the place of issue of the said notes.

The assets and property of a bank are defined as assets for the payment of debts or other obligations contracted or entered upon or due and payable in the colony.

The other clauses (Part II.) of the same Act were originally passed for twelve months only, but their operation was extended in 1894 for another twelve months —viz., till September, 1895. As amended by subsequent enactments, they run as follows: The Governor may declare by Proclamation the notes of any bank named to be a legal tender of money to the amount therein expressed to be payable. The period of time is to be limited by the Proclamation, and no such Proclamation is to be made unless the Governor in Council is satisfied that, as between the bank and its creditors, its assets in the colony exceed its liabilities in the colony. The bank must further pay all such notes in gold on presentation, after expiry of the time limited, at the office of the bank at the place of issue At any time within six months after the period limited by the Proclamation, the Colonial Treasurer, on being satisfied that a bank-note covered by the Proclamation has been presented and not paid, shall pay the same in gold to any *bonâ fide* holder.

On the 29th June, 1894, the Colonial Treasurer introduced in the House of Representatives three Bills relating to banking, which were thereupon passed through all stages and became law forthwith.

The most important of these, intituled "An Act to guarantee out of the Consolidated Fund a Special Issue of Shares by the Bank of New Zealand to the Amount of Two Million Pounds Sterling," provided for the increase of the capital

by the issue of shares* to an amount not exceeding two million pounds sterling, in guaranteed shares of ten pounds each, without further liability. These shares are preferential in respect of both capital and dividend, and the liability of the holders of ordinary shares is to secure payment of the guaranteed shares and the dividends thereon. The directors can refuse to register the transfer of ordinary shares. The guaranteed shares are to be called in at the end of ten years, and cancelled on payment of the principal sum with accrued dividend. The rate of dividend on preferential shares is not to exceed 4 per cent. per annum, and is to be paid by the bank. The guaranteed or preferential shares and dividends thereon are to be a charge upon and, in case of default by the bank, payable out of the Consolidated Fund of the colony; but if at any time any money shall be payable under the guarantee, the assets and property of the bank are to be security for the repayment of money so advanced; if the money be not repaid, the Colonial Treasurer may appoint a Receiver.

One-half of the sum of two million pounds authorised by the Act to be raised is to be at the disposal of the bank for use in its ordinary business, and the remainder is to be invested as the Colonial Treasurer may approve, or as may be specially provided by law. Until the guaranteed shares are called in and cancelled, no dividend is to be paid to ordinary shareholders without the consent of the Colonial Treasurer, who is empowered to satisfy himself that any proposed dividend will not unduly affect the security of the colony in respect of the guarantee.

By section 5 of the Act, the Colonial Treasurer might require the directors to call up £500,000, being one-third of the reserve capital, within twelve months, and this has accordingly been done.

As provided by the Act, the head office of the bank was removed to Wellington, and a new Board of directors elected. The Governor in Council appointed a President (*office since abolished under Act of 1898, see* post), and an Auditor of the business outside the United Kingdom. An Auditor of the business within the United Kingdom was appointed by the Agent-General.

The shares held in the Bank of New Zealand Estates Company (Limited) by the bank are, pending the completion of liquidation, to be treated in valuing as at par.

"The Bank Shareholders Act, 1894," provided that the directors of any bank may decline to register any transfer of shares upon which there is any liability made by a shareholder to any person of whose responsibility they may not be satisfied. "The Bank Directors and Shares Transfer Act, 1894," gave authority to directors to refuse approval, without assigning reasons, to any transfer of shares on which there is liability. It limited the number of directors to not less than five or more than seven. (See subsequent legislation in 1898 as to directory.)

"The Bank of New Zealand and Banking Act, 1895," and its Amendment Act.

This Act was passed on the 4th of September, 1895. It provided for writing off the paid-up capital of the Bank of New Zealand (£900,000), together with the proceeds (estimated at £450,000) of the first call of £3 6s. 8d. on the reserve liability of £10 per share.

A sum of £500,000 new capital was raised by preferred shares, and issued to the colony in exchange for Government securities. The preferred shares bore interest at 3½ per cent. The bank was given the right to repurchase at par

* By further Amendment Act these shares were to be issued in the form of negotiable stock certificates or warrants to bearer, of such amounts as the directors may determine. The certificates with warrants or coupons are transferable by delivery. The holders of stock certificates or warrants may exchange these for registered stock, which is made transferable in such amounts as directors may sanction. Shares or stock may be held by any person without limit as to number, provided that the total value does not exceed two millions sterling.

within six years (since taken advantage of). Further share capital was created by a second call of one-third of the reserve liability (£3 6s. 8d. per share) in four instalments, the final third to be called up at any time after the 31st December, 1898. The sum of one million pounds, required by the Share Guarantee Act of 1894 to be invested as the Colonial Treasurer might approve, was released for employment by the bank in its ordinary business. It was provided that one of the directors of the bank was to be appointed by the Governor, and one of the then directors to resign to make way for the Government appointee. (See subsequent legislation in 1898 as to directory.)

An Assets Realisation Board is established to purchase all the assets of the Estates Company, and of the Auckland Agricultural Company, for the sum of £2,731,706, being the estimated value of the properties on the 31st of March, 1895, subject, however, to an adjustment of station accounts, the purchase-money to be paid in debentures issued by the Assets Board, having a nine years' currency and bearing interest at 3½ per cent. per annum from the 31st March, 1895, any deficiency to be guaranteed by the Government as a charge upon the Consolidated Fund of the colony.

Provision is made for securing the Government against loss on account of this guarantee, and the Colonial Treasurer may, in the event of any deficiency, appoint a Receiver in respect of the securities with the powers of a liquidator appointed by the Supreme Court. The Assets Realisation Board is a body corporate, consisting of three members, two appointed by the Governor and one chosen by the directors of the bank.

Section 3 of "The Banking Act, 1894," is repealed, and power is given to the Bank of New Zealand to purchase the business and assets of any other bank doing business in the colony, excepting such assets as are found to be bad, doubtful, or valueless. Any such purchase is conditional on ratification by the shareholders of the selling bank and the approval of Parliament. [*The business of the Colonial Bank of New Zealand has since been purchased under the authority given, the contract being approved under the Amendment Act of 1895, section 3, and subsequently ratified by the shareholders of the selling bank.*]

So long as the colony remains in any measure liable under the Act, or the Share Guarantee Act of 1894, the proprietors of the bank may not take any steps towards winding up or dissolving the bank.

The Assets Board are to draw up a balance-sheet every six months, and lay the same before Parliament.

"The Bank of New Zealand and Banking Act, 1898."

Consequent on the report of a Committee of the House of Representatives appointed to make inquiries respecting the affairs of the Bank of New Zealand, a statute was passed in 1898 bearing the above title.

It provides for a Board of Directors consisting of six persons, instead of five, of whom four are appointed by the Governor in Council and two elected by the shareholders of the bank.

The office of President *is* abolished, with its power of veto; while the old constitution of the Board, under which the President and one director only were appointed by the Governor in Council, and three by the shareholders, gives way to the new one.

Of the four members in the new Board who are appointed by the Governor in Council, two retired on the 31st March, 1901, the retiring directors being decided by lot amongst the four. On the 31st March, 1902, and on the same day in each subsequent year, the two members who have been longest in office retire. The ordinary time of office of the four members is thus two years.

The two directors *elected* by the shareholders of the bank hold office for an ordinary term of two years, subject to the provision that one is to retire on the 31st March, 1901, it being decided by lot between the two which is to retire.

On the above-named day in 1902, and the same day in each subsequent year, the member who has been longest in office retires.

Provision was made for offering the retiring President of the old Board a sum of £4,500 by way of compensation, leaving it open to him to decline, with power of instituting proceedings to recover damages for wrongful removal from office. [The President has since retired, and is now one of the directors elected by the shareholders.]

The remuneration of the new Chairman and directors is £2,000 per annum, which they divide amongst themselves, in shares fixed by resolution of the Board.

There are sundry provisions as to the voting at meetings, and a carefully limited power of veto in respect of resolutions passed by shareholders, under certain circumstances, is given.

Amongst other various matters provided for, it may be mentioned that the Governor in Council may appoint an Assistant Auditor. The Chief Auditor is given the right to attend meetings of the Board, and empowered to suspend the operation of any act or proceedings until the Board has had an opportunity of considering the same at a future meeting.

SAVINGS BANKS.

The number of post-offices open for the transaction of savings-bank business at the end of 1900 was 445.

There were 46,086 new accounts opened in the year, and 31,724 accounts were closed. The total number of open accounts at the end of 1900 was 197,408.

The deposits received during the year amounted to £4,170,428 15s. 3d., and the withdrawals to £3,827,416 7s. 3d., the excess of deposits over withdrawals having thus been £343,012 8s. The total sum standing at credit of all accounts on the 31st December, 1900, was £5,809,552 5s. 3d., which gave an average of £29 8s. 7d. to the credit of each open account.

The following were the securities, &c., standing in the name of the Postmaster-General on account of the Post-Office Savings-Bank Fund on the 31st December, 1900:—

Description of Securities.	Nominal Value.			Value at Cost Price.		
	£	s.	d.	£	s.	d.
"Aid to Public Works and Land Settlement Act, 1896," Debentures at 3½ per cent. ..	250,000	0	0	250,000	0	0
"Aid to Public Works and Land Settlement Act, 1899," Debentures at 3½ per cent. ..	125,000	0	0	125,000	0	0
"Aid to Public Works and Land Settlement Act, 1896–97," Debentures at 3 per cent. ..	65,000	0	0	65,000	0	0
"Consolidated Loan Act, 1867," Debentures, 4 per cent.	13,000	0	0	12,480	0	0
"Consolidated Stock Act, 1884," Debentures, 3½ per cent.	107,100	0	0	107,100	0	0
"Dairy Industry Act, 1898," Debentures, 3½ per cent.	1,781	0	0	1,781	0	0
"Defence and other Purposes Loan Act, 1870," Debentures, 4 per cent.	75,000	0	0	72,000	0	0
"Defence and other Purposes Loan Act, 1870," Debentures, 4½ per cent.	8,100	0	0	8,100	0	0
District Railways Purchasing Acts, 1885 and 1886, Debentures, 4 per cent.	42,000	0	0	36,076	17	8
District Railways Purchasing Acts, 1885 and 1886, Scrip, 4 per cent.	34,100	0	0	34,100	0	0

Description of Securities.	Nominal Value.			Value at Cost Price.		
	£	s.	d.	£	s.	d.
Dunedin Garrison Hall Debentures, 5 per cent.	6,000	0	0	6,000	0	0
"General Purposes Loan Act, 1873," Debentures, 4 per cent.	5,200	0	0	4,342	0	0
"Government Loans to Local Bodies Act, 1886," Debentures, 3½ per cent.	457,500	0	0	457,500	0	0
Greymouth Harbour Board Debentures, 4 per cent.	100,000	0	0	100,000	0	0
Hamilton Borough Debentures, 5½ per cent.	3,000	0	0	3,000	0	0
Hokitika Harbour Board Debentures, 5 per cent.	10,000	0	0	10,000	0	0
"Immigration and Public Works Loan Act, 1870," Debentures, 4 per cent.	174,200	0	0	167,272	0	0
"Immigration and Public Works Loan Act, 1870," Debentures, 4½ per cent.	20,900	0	0	20,527	10	0
"Immigration and Public Works Loan Act, 1870," Debentures, 4 per cent. (Imperial guaranteed)	400,000	0	0	400,000	0	0
Inscribed Stock, 3 per cent.	1,884,940	0	0	1,879,614	0	0
"Land for Settlements Acts, 1894," Debentures, 3½ per cent.	731,066	0	0	731,066	0	0
Land for Settlements Acts, 1897–1899, Debentures, 3½ per cent.	62,000	0	0	62,000	0	0
"Lands Improvement and Native Lands Acquisition Act, 1894," Debentures, 4 per cent.	264,000	0	0	264,000	0	0
"Lands Improvement and Native Lands Acquisition Act, 1894," Debentures, 3½ per cent	35,000	0	0	35,000	0	0
Oamaru Borough Consolidated Loan 1893 Debentures, 5 per cent.	13,800	0	0	13,800	0	0
Oamaru Harbour Bonds, 5½ per cent.	32,000	0	0	32,000	0	0
Patea Harbour Board Debentures, 4½ per cent.	13,000	0	0	13,000	0	0
Thames Borough Debentures, 6 per cent.	6,500	0	0	6,500	0	0
Thames Harbour Board Debentures, 4 per cent.	10,000	0	0	10,000	0	0
"Public Revenues Act, 1893" (Treasury Bills), 3½ per cent.	519,200	0	0	519,200	0	0
Westport Harbour Board Debentures, 4 per cent.	459,500	0	0	459,500	0	0
Accrued Interest on Post Office Account	..			..		
Totals	5,928,887	0	0	5,905,959	7	8

There are six* savings-banks in the colony not connected with the Post Office. The total amount deposited in them in 1900 was £599,770 9s. 6d., of which the deposits by Maoris comprised £59. The withdrawals reached the sum of £571,742 19s. 6d., or less than the total deposits by £28,027 10s. The total amount to the credit of the depositors at the end of the year was £855,792 4s. 8d., of which sum £89 15s. 9d. belonged to Maoris.

Summary of all Deposits.

If the total deposits at the end of the year be assumed to be equal to the average for the last quarter, then it may be affirmed

* One in liquidation since 16th August, 1899.

that, exclusive of Government moneys, the deposits in the several banks of issue and in the two classes of savings-banks amounted at the end of 1900 to £21,458,483. In addition, there are the deposits with building societies, which in 1899 were £218,562, and it is known that there were also deposits with financial companies, of which no particulars have been supplied to the department. The known deposits reach an average of £28 7s. 8d. per head of the population, exclusive of Maoris.

Building Societies.

There were 71 registered building societies in operation in the colony at the end of 1899. Of these, 32 were terminable societies, the rest were permanent.

The total receipts by these societies during their financial year were £613,056, of which deposits comprised £226,211.

The assets at the end of the year were valued at £1,040,419. The liabilities were: To shareholders, reserve fund, &c., £798,086; to depositors, £218,562; and to bankers and other creditors, £23,771.

Joint-stock Companies.

During the year ended 31st December, 1900, 307 joint-stock companies, with a total nominal capital of £3,936,035, were registered under the provisions of "The Companies Act, 1882."

Friendly Societies.

The Registrar of Friendly Societies received returns for the year 1899 from 433 lodges, courts, tents, &c., of various friendly societies throughout the colony. The number of members at the end of 1899 was 38,202.

The total value of the assets of these societies was £728,249, equivalent to £19 1s. 3d. per member. Of the total assets, the value of the sick and funeral benefit funds was £673,590.

The receipts during the year on account of the sick and funeral funds amounted to £87,272, and the expenditure to £61,865, of which the sick-pay to members reached the sum of £39,687. In addition to the sick-pay, the sum of £35,117 was paid out of the medical and management expenses fund for attendance given and medicine supplied to the members and their families.

The Registrar of Friendly Societies has supplied particulars of the number of members of friendly societies, the amount of their accumulated capital, and the average capital per member in each of the Australasian Colonies, according to the latest published statistics, arranged in order of membership:—

Colony.	Date of Return.	Number of Lodges.	Number of Members.	Amount of Funds.	Capital per Member.
				£	£ s. d.
Victoria	31st Dec., 1899	1,105	93,700	1,257,362	13 8 5
New South Wales ..	" 1897	817	69,124	596,463	8 12 7
South Australia ..	" 1895	487	42,703	475,654	11 2 9
New Zealand ..	" 1899	433	38,202	728,249	19 1 3
Queensland ..	" 1899	340	29,099	222,084	7 12 8
Tasmania	" 1898	120	11,871	95,202	8 0 5
Western Australia ..	" 1899	85	5,554	40,644	7 6 4

New Zealand shows by far the highest average of capital per member, Victoria following next, but not closely. The South Australian average is not quite two-thirds, and those of New South Wales, Queensland, Western Australia, and Tasmania less than half the sum shown for this colony.

Mortgages.

In a return to an order of the House of Representatives last session it is stated that, during the year ended 31st March, 1900, mortgages to the value of £7,434,763 were registered in the several land registration districts of the colony, while the monetary value of those paid off amounted to £5,723,108. Compared with a similar return for the year 1898-99, the mortgages registered show an increase of £724,336, the total amount for the earlier year having been £6,710,427.

The total amounts represented in the mortgages registered and paid off in each registration district during 1898-99 and 1899-1900 were :—

District.	1899-1900. Mortgages Registered.	1899-1900. Mortgages Paid off.	1898-99. Mortgages Registered.	1898-99. Mortgages Paid-off.
	£	£	£	£
Auckland ..	765,350	878,135	845,011	473,837
Poverty Bay ..	225,723	115,999	127,115	149,909
Taranaki ..	639,641	377,032	518,066	341,032
Hawke's Bay ..	847,895	763,517	621,703	737,268
Wellington ..	2,077,446	1,198,238	1,880,281	1,056,188
Marlborough ..	102,209	129,666	127,277	105,137
Nelson ..	152,278	138,849	216,626	261,708
Westland ..	20,535	9,142	21,067	16,970
Canterbury ..	1,714,800	1,373,906	1,455,543	1,308,961
Otago ..	517,110	484,507	598,928	540,207
Southland ..	371,776	254,117	298,810	282,121
Totals ..	£7,434,763	£5,723,108	£6,710,427	£5,273,338

Classified according to the various rates of interest, the amounts in the mortgage deeds registered during the two years were :—

Year 1899-1900.		1898-99.		Rate of Interest.
£		£		
101,391	..	57,005	..	at 4 per cent or under.
1,731,654 (*a*)	..	1,493,913 (*f*)	..	at 4½ per cent.
171,133	..	127,491 (*g*)	..	at 4¾ per cent.
2,298,723	..	2,258,400	..	at 5 per cent.
355,541 (*b*)	..	395,329 (*h*)	..	at 5½ per cent.
698,147 (*c*)	..	832,858 (*i*)	..	at 6 per cent.
5,190	..	12,650	..	at 6¼ per cent.
15,800	..	125,916	..	at 6½ per cent.
5,900	..	9,340	..	at 6¾ per cent.
361,157 (*d*)	..	261,485	..	at 7 per cent.
31,344 (*e*)	..	20,839 (*j*)	..	at 7½ per cent.
158,536	..	173,114	..	at 8 per cent.
89,216	..	85,178	..	at 8½ per cent. and over.
1,411,031	..	856,909	..	at rates not specified.
£7,434,763		£6,710,427		

(*a*.) Including £4,000 at 4⅜ per cent., and £4,500 at 4¼ per cent. (*b*.) Including £2,050 at 5⅛ per cent., and £24,180 at 5¼ per cent. (*c*.) Including £2,693 at 5¾ per cent. (*d*.) Including £144,892 at 6⅜ per cent. (*e*.) Including £700 at 7¼ per cent. (*f*.) Including £15,550 at 4¼ per cent. (*g*.) Including £13,500 at 4⅝ per cent., and £500 at 4½ per cent. (*h*.) Including £3,400 at 5⅛, £41,016 at 5¼, and £1,800 at 5⅓ per cent. (*i*.) Including £550 at 5¾ per cent. (*j*.) Including £1,000 at 7¼ per cent.

Comparison of the foregoing with the amounts at the various rates of interest in the mortgages registered during 1895–96 shows the lowering of the rates that has taken place :—

Year 1895-96.		
£		
26,285	..	.. in small sums at less than 5 per cent.
833,226	..	.. at from 5 per cent. to 5¼ per cent.
732,764	..	.. at 5½ per cent.
116,600	..	.. at 5¾ per cent.
1,372,261	..	.. at from 6 per cent. to 6¼ per cent.
371,896	..	.. at from 6½ per cent. to 6¾ per cent.
599,542	..	.. at from 7 per cent. to 7¼ per cent.
111,651	..	.. at 7½ per cent.
382,348	..	.. at 8 per cent.
173,416	..	.. in small sums, at rates above 8 per cent.
853,801	..	.. at rates which are not specified.
£5,573,790		

The total amount shown in deeds as secured by mortgage under the Land Transfer Act on 31st March, 1900, was £34,746,992, as against £33,035,337 in March, 1899, £32,152,288 in March, 1898, and 31,112,921 in March, 1897; but in respect of some transactions the same money may be included more than once.

Life Insurance.

There were existing in the colony at the close of the year 1899 as many as 85,540 life insurance policies, an average of 113 in every 1,000 persons living. The gross amount represented by these policies was £21,762,155, an average of £254 8s. 2d. for each policy, and of £28 15s. 4d. for every European inhabitant of the colony at the end of the year.

The distribution of these policies shows that nearly one-half are held in the Government Life Insurance Department:—

Name of Office.	Number of Years of Business in the Colony.	New Zealand Business only.	
		Number of existing Policies at End of Year 1899.	Gross Amount insured by Policies at End of Year 1899.
			£
Australian Mutual Provident Society	38	25,772	7,140,042
Australian Widows' Fund Life Assurance Society (Limited) ..	2	826	226,781
Citizens' Life Assurance Company (Limited)	6	2,444	388,050
Colonial Mutual Life Assurance Society (Limited)	16	4,443	1,181,706
Equitable Life Assurance Society of the United States	15	717	296,848
Mutual Life Association of Australasia	23	4,831	1,270,469
National Mutual Life Association of Australasia (Limited)	20	6,954	1,630,790
New York Life Insurance Company ..	13	139	53,313
Scottish Metropolitan Life Assurance Company	3	48	16,050
Life Insurance Department of the New Zealand Government ..	30	39,366	9,558,166
Totals, December, 1899 ..	..	85,540	£21,762,155
Totals, December, 1898 ..	..	80,326	£20,706,439

The rate at which life insurance increased is evidenced by the difference between the amounts insured at the end of each of the two years 1898 and 1899, being a sum of £1,055,716, or 5·10 per cent., while for the same twelve months the population increased by 1·87 per cent. only.

Industrial Life Assurance.

In addition to the ordinary life insurance transactions alluded to above, there were in 1899 two industrial life assurance offices doing business in New Zealand. The number of policies in existence and the gross amount insured by such policies at the end of the year were:—

Name of Office.	Number of Years of Business in the Colony.	New Zealand Business only.	
		Number of existing Policies at End of Year 1899.	Gross Amount insured by Policies at End of Year 1899.
			£
The Citizens' Life Assurance Company (Limited)	6	14,881	343,997
The Provident and Industrial Insurance Company of New Zealand	10	6,185	135,879
Totals, December, 1899 ..	..	21,066	£479,876
Totals, December, 1898 ..	..	20,874	£515,132

Here a decrease of £35,256, or 6·84 per cent., is shown to have taken place in twelve months.

"THE NEW ZEALAND ACCIDENT INSURANCE ACT, 1899."

By this statute the Commissioner of Life Insurance is given power to insure persons from accident, and specially employers against liability for accident to any person employed, besides generally doing the business of an insurer against accident.

The Act provides for capital for the accident insurance business by empowering the Governor in Council to raise by debentures or scrip, or by issue of inscribed stock, sums of money not exceeding £25,000 altogether. To redeem at maturity the securities issued in respect of capital raised there are provisions for a sinking fund.

The funds, assets, and liabilities of the Government Life Insurance Department belonging to its accident insurance branch are to be kept separately and distinct from the main life insurance business, and powers are vested in the Governor to make regulations in regard to tables fixing rates of premiums, and other details, for the conduct of accident insurance.

THE PUBLIC TRUST OFFICE.

This institution was described in full detail in the Year-book for 1898.

Classifying the business as on the 31st March, 1901, the results are :—

	Number of Estates.	Value of Estates.
		£
Wills and trusts (including sinking funds accounts)	684	1,022,838
Intestate estates	867	134,820
Real estates	69	7,459
Lunatic estates	626	159,087
Native reserves	110	363,076
West Coast Settlement Reserves ..	293	622,604
Unclaimed lands	249	17,070
Total	2,898	£2,326,954

The capital funds of the Public Trust Office invested amounted, on the 31st March, 1901, to £1,618,379. The investments are as follow:—

	£
New Zealand Government securities	607,798
Local bodies' debentures	19,239
Mortgages of freehold property	991,342
Total	£1,618,379

Private Wealth.

The number and value of estates of deceased persons finally certified, on which duty was paid during the years 1898, 1899, and 1900 are shown, classified according to amount:—

Value of Estates.	1898.		1899.		1900.	
	Number of Estates.	Aggregate Value on which Duty was Paid.	Number of Estates.	Aggregate Value on which Duty was Paid.	Number of Estates.	Aggregate Value on which Duty was Paid.
£ £		£		£		£
Under 500 ..	714	147,280	794	150,091	752	146,105
500 to 1,000 ..	219	157,709	224	161,220	224	158,392
1,000 „ 2,000 ..	151	214,650	126	180,909	172	246,012
2,000 „ 3,000 ..	76	136,749	57	138,204	66	161,724
3,000 „ 4,000 ..	31	106,097	30	105,077	37	129,079
4,000 „ 5,000 ..	24	107,117	18	81,967	26	115,295
5,000 „ 7,500 ..	20	121,253	34	209,185	20	121,080
7,500 „ 10,000 ..	12	101,264	13	110,765	16	139,792
10,000 „ 15,000 ..	21	254,756	10	126,661	13	156,649
15,000 „ 20,000 ..	6	100,395	9	155,058	4	69,350
20,000 and over ..	18	784,116	12	601,338	15	517,472
Totals ..	1,287	2,281,386	1,327	2,020,475	1,345	1,960,950

The number of estates admitted to probate, and the number of adult deaths in each year, 1895 to 1900, are given, and it will be seen that nearly 29 out of every 100 adults who died during the year 1900 left property subject to estate duty.

Year.	Number of Estates.	Number of Adult Deaths.	Proportion per Cent. of Adults who died leaving Property on which Duty paid.
1895	767	4,033	19·02
1896	855	3,944	21·68
1897	1,128	4,258	26·49
1898	1,287	4,696	27·41
1899	1,327	4,719	28·12
1900	1,345	4,683	28·72

On these data an attempt has been made to compute roughly the total value of private property in the colony. This method of

estimating the private wealth of a people by means of the probate returns may not be strictly accurate, and is indeed strongly objected to by some statisticians, but it was nevertheless selected by the late Professor Mainwaring Brown as the best and most trustworthy plan.

Calculations of the wealth of the living on the proportional basis of amounts left by the dead have not been considered satisfactory in some of the Australian colonies, but in New Zealand, where wealth is more evenly distributed, the results have proved fairly comparable year by year, and the method can be used with a greater degree of confidence. Dividing the aggregate amount admitted to probate during a series of years by the number of *deaths* occurring within the same period, the average value of property left by each person dying is obtained. On the assumption that the average wealth owned by each person living is equal to that left by each person dying, the total aggregate private wealth may readily be found. For a calculation of this kind it is necessary to take the average results for a series of years, as any inference drawn from the figures of a single year would be untrustworthy; for an increase in the death-rate must necessarily give a corresponding decrease in the estimated wealth, unless the value of estates admitted to probate maintains year by year the same ratio to the number of deaths. An epidemic among young children who have no property to leave would unduly lower the average; while, on the other hand, the deaths of a few wealthy persons would raise it abnormally. It must also be remembered, when using these figures for comparative purposes, that the lowness of the death-rate in New Zealand is in great measure due to the small mortality among infants. By putting the figures for several years together, and taking the average for the term, results may be arrived at, thus :—

Years, inclusive.	Amount sworn to.	Total Number of Deaths.	Average Amount left by each Person.	Average Number of Persons living.	Average Total Wealth for each Year of the Period.
	£		£ s. d.		£
1896–1900	10,409,909	35,151	296 3 0	735,658	217,863,800

It is manifest, however, that this average does not exhibit with sufficient accuracy the actual *present* amount of wealth. If the average amount per head were the same at the end of the year 1900 as for the period 1896–1900—viz., £296·148—then the total wealth possessed by the 770,682 persons in the colony on the 31st December of that year would be £228,236,158.

These figures, however, fall short of the full amount of private wealth, as the values sworn to do not include those estates on which no stamp duty is payable—viz., land and goods passing to the husband or wife of the deceased, and a great number of properties under £100. The aggregate value of such estates must be considerable, and should give a substantial increase to the average

amount per head, and therefore to the total wealth. But, on the other hand, only 34 per cent. of the deaths in 1900 were of persons under twenty years of age, and the census of 1896 showed that 48 per cent. of the population living at that time were under twenty: so that, in assuming the average wealth per head of the living to be the same as the average left by each one dying, the aggregate is somewhat unduly swelled, because, as a rule, persons under twenty have little or no property.

The estimated private wealth for each of ten years is shown by the following figures :—

Year.	Amount. £	Average per Head. £
1891	145,780,502	230
1892	152,065,087	236
1893	156,058,273	232
1894	154,715,821	225
1895	152,918,021	219
1896	170,007,843	238
1897	183,781,780	252
1898	201,154,323	271
1899	217,587,481*	288
1900	228,236,158	296

The Government Statistician of New South Wales has estimated the private wealth of the seven colonies of Australasia for the year 1899 at £1,079,246,000.

An attempt to arrive at the value of the public property in the colony led to the following particulars being ascertained :—

PUBLIC PROPERTY, 1898.

	£	£
Public property—*i.e.*, land and improvements not owned by individuals, exclusive of Government railways (figures supplied by the Valuer-General) :—		
Crown lands	£12,986,848	
Local authorities' lands	4,704,442	
Educational lands	2,969,438	
Church and other lands	2,274,051	
		22,934,779
Government railways, open and under construction (figures from Public Works Department)		16,762,455
Other public works—viz., telegraphs, lighthouses, harbours, and water-supply on goldfields		4,551,327
Total public property †		£44,248,561

This amount of £44,248,561, with the sum of £228,236,158 (see note (*) to table) previously shown as the private wealth, estimated from probate returns, gives a total of £272,484,719. If to this be added £7,007,522, the value of Native lands with their

* N.B.—A test has been applied to these figures with a view of ascertaining their reliability. The Valuer-General returned £138,591,347 sterling as the value of all land and improvements in the colony, not including Government railways in 1898. From this amount, deducting £22,934,779 and £4,551,327 on account of public property, as per table hereunder, besides £7,007,522 for Native lands with improvements, leaves, say, £104,000,000 sterling for land and improvements privately owned. Take this sum (£104,000,000) from the £217,000,000 of private wealth as here shown, and there remains £113,000,000 sterling for personal estate, the actual amount as returned by the Property-tax Commissioner for the year 1898 having been £85,000,000.

† Of the value of public property other than that enumerated above there is no account available.

improvements (as stated by the Valuer-General), a final total of £279,492,241 is reached.

So much of this sum as represents private wealth may be considered as *net* wealth, because stamp duty is paid after subtracting liabilities on estates. But the debt of the General Government and that of the local bodies (so far as raised abroad) must be deducted. These amounts were, in the year 1900, £43,481,279 and £5,478,300 respectively. Allowing for these, it is found that the colony had in 1900 at least £230,532,662 value of public and private wealth. No doubt there is more, but information as to public wealth other than property owned by the Government is not procurable.

Earnings and Income.

The amount of the aggregate annual earnings of the people of New Zealand is given in the Year-book of 1897 (p. 283). To arrive at this estimate the method adopted was to allot to each person the probable income earned in respect of the occupation set down against his or her name in the household schedules collected at the census of 12th April, 1896. Exception may no doubt be taken to the plan of basing a calculation on a series of arbitrary assumptions, but there is precedent for such a course. The results of the calculation were given without any guarantee of accuracy, similar figures having been called for in the past. Indeed it is important to make clear that the figures must only be considered as put forward with the greatest diffidence, and rather of necessity than otherwise. They may indeed give a fair idea of the facts, but the responsibility of using them for any particular purpose is not accepted by the Registrar-General.

Wages.

The aggregate of wages paid in the colony for the year 1896, as given in the Year-book of 1897 (p. 284), was arrived at by assigning to each wage-earner the probable annual income each would derive from the profession or occupation followed. As in the case of income, the calculations made were put forward merely by way of an attempt to get as closely as possible to the facts, and because asked for; but no assurance whatever can be given as to the exactness of the conclusions stated, and the Registrar-General does not accept any responsibility in regard to their use.

Cost of Living.

An estimate was made in 1894 of the cost of living in New Zealand, including, besides what was spent on necessaries, the additional outlay on what may be termed luxuries, and on things of occasional necessity. The rate arrived at per head of population was £35 6s. 1d. per annum for that year. Fuller particulars are given in former issues of the Year-book.

The average income per head previously referred to was believed to be from £37 12s. to £44 per annum.

Mr. Mulhall, in his "Dictionary of Statistics," gives the average expenditure per head of population for various countries specified as follows:—

Country.	Average Annual Expenditure per Head. £ s. d.	Country.	Average Annual Expenditure per Head. £ s. d.
United Kingdom ..	29 14 9	Norway	19 0 0
France	23 19 4	Denmark	28 11 5
Germany	20 3 4	Holland	20 17 4
Russia	10 1 11	Belgium	25 8 2
Austria	14 4 9	Switzerland ..	18 0 0
Italy	11 11 0	United States ..	32 16 2
Spain	15 12 6	Canada	23 6 2
Portugal	11 5 6	Australia	33 10 3
Sweden	20 8 4	Argentina ..	27 9 1

The estimate for Australasia, as made in 1894 by Mr. Coghlan, the Government Statistician of New South Wales, was as high as £43 12s. 10d. per head.

Annual Consumption of Food, Stimulants, etc.

The quantities used per head of population in New Zealand of some of the main articles of consumption will be found in the Year-book for 1898. The figures are averages for five years.

Prices and Wages.

The average prices of produce, live-stock, provisions, &c., in each provincial district are given for the year 1900 in tabular form on pages 239 and 240. While the variations for the different districts are such as to render it in most cases inadvisable to show averages for the colony, this has nevertheless been done for the staples of food, *i.e.*, bread, meat, and milk, also for tea and sugar, which may almost be called necessaries. Averages for the colony, taken out for the years 1878, 1888, 1898, 1899, and 1900, indicate generally a decline in prices with the advance of time. In striking these, prices on the goldfields have not been taken into account:—

—		1878.	1888.	1898.	1899.	1900.
		s. d.	s. d.	s. d.	s. d.	s. d.
Bread	per lb.	0 2	0 1⅞	0 1½	0 1¼	0 1¼
Beef	per lb.	0 5½	0 3¾	0 3¾	0 4	0 4¼
Mutton	per lb.	0 3¾	0 3½	0 3	0 3½	0 3½
Sugar	per lb.	0 5	0 3¼	0 2⅜	0 2⅜	0 2⅜
Tea	per lb.	2 9	2 3½	1 10	1 11	1 9
Butter (fresh) ..	per lb.	1 4	0 9¼	0 9⅜	0 10	0 10
Cheese (colonial) ..	per lb.	0 10	0 6	0 5½	0 5½	0 5½
Milk	per quart.	0 4½	0 3¼	0 3	0 3	0 3

Rates of Wages.

The average rates of wages paid in 1900 in each provincial district for agricultural, pastoral, artisan, and servants' labour are given on pages 241 to 244.

AVERAGE PRICES OF PRODUCE, LIVE-STOCK, PROVISIONS, ETC., IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1900.

Produce, &c.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield).
I. AGRICULTURAL PRODUCE.									
Wheat .. .. per bushel (60lb.)	2/5 to 3/	2/10	2/6 to 3/	2/8 to 3/	2/3	2/9 to 3/	3/ to 3/3	2/	2/6 to 3/
Barley .. .. per bushel (47lb.)	2/3 to 2/8	2/10	2/3 to 3/	2/6 to 2/9	2/	2/6	3/ to 3/	2/	1/9 to 2/9
Oats .. .. per bushel (40lb.)	1/10 to 3/	2/7	2/4 to 2/9	2/3 to 2/9	2/3	2/ to 3/	2/6	1/8	1/6 to 2/
Maize .. .. per bushel (56lb.)	2/5 to 3/	4/	2/4 to 3/	2/6 to 2/10	4/	3/4 to 3/6	4/6	3/	2/10
Bran .. .. per bushel (20lb.)	9d. to 1/	1/	1/ to 1/3	1/ to 1/3	9d.	10d. to 1/3	1/ to 1/3	..	8d. to 9d.
Hay .. .. per ton ..	£2/17/6 to £3/10	£4	£2/5 to £3/10	£2/10 to £5	£1/10	£3/5 to £4/10	£5/10	£3	£2/10 to £3
II. FLOUR AND BREAD.									
Flour, wholesale .. per ton of 2,000lb.	£7 to £8/10	£7/5	£7 to £9	£7/5 to £7/10	£8/10	£6 to £8/10	£7 to £9	£6/5	£6/10 to £7
Flour, retail .. per bag of 50lb. ..	3/9 to 4/6	4/3	4/6 to 5/3	4/3 to 4/6	4/9	4/ to 5/	4/ to 5/	3/10½	3/9 to 4/
Bread .. .. per 4lb. loaf ..	5d. to 6d.	6d.	6d.	5d. to 6d.	4d.	6d. to 7d.	6d. to 7d.	4d.	4d. to 5d.
III. LIVE-STOCK AND MEAT.									
Horses, draught .. per head ..	£25 to £40	£40	£25 to £40	£30 to £40	£25 to £45	£25 to £50	£35 to £40	£30	£35 to £40
Horses, saddle and harness .. per head ..	£7 to £15	£20	£10 to £15	£12 to £25	£10 to £20	£15 to £20	£20	£15	£12 to £20
Cattle, fat .. per head ..	£6 to £10	£6/10	£6/10 to £8	£7 to £9	£7	£5/10 to £8	£10	£10	£8 to £9
Cattle, milch cows .. per head ..	£4 to £6	£5	£4 to £5	£5 to £8	£5 to £15	£6 to £7	£6 to £7	£8	£5 to £7
Sheep, fat.. .. per head ..	10/ to 15/	14/	13/ to 14/	13/ to 15/	14/	14/ to £1	18/ to 19/	£1	16/ to £1
Lambs, fat .. per head ..	8/ to 13/	11/	8/ to 13/6	9/ to 12/	11/6	10/ to 15/	12/6 to 14/	16/	12/ to 14/
Butchers' meat:—									
Beef .. .. per lb.	3d. to 4d.	3d.	4d. to 4½d.	4d. to 6d.	4½d.	4½d. to 6d.	4d. to 6d.	4d.	5d. to 6d.
Mutton .. .. per lb.	2⅔d. to 4d.	3d.	4d. to 4½d.	4d. to 5d.	3½d.	4d. to 7d.	4d. to 5d.	4d.	4d. to 5d.
Veal .. .. per lb.	3d. to 4d.	3d.	4d. to 6d.	5d. to 6d.	5d.	4d. to 6d.	5d. to 6d.	3½d.	5d.
Pork .. .. per lb.	3d. to 5d.	5d.	4d. to 6d.	5d. to 6d.	5d.	5d. to 6d.	6d.	6d.	5d. to 6d.
Lamb .. .. per lb.	3d. to 6d.	5d.	5d. to 6d.	5d. to 6d.	5d.	5d. to 8d.	7d.	6d.	5d. to 6d.
IV. DAIRY PRODUCE.									
Butter, fresh .. per lb.	7d. to 8½d.	1/	9d. to 1/	8d. to 1/	1/	7d. to 1/	1/	9d.	7d. to 1/2
Butter, salt .. per lb.	6d. to 7d.	..	6d. to 9d.	7d. to 8d.	9d.	10d. to 1/	1/	9d.	6d. to 1/
Cheese, colonial .. per lb.	3½d. to 7d.	5d.	7d. to 8d.	6d. to 7d.	6d.	6d. to 8d.	7d.	7d.	5d. to 8d.
Cheese, imported .. per lb.	6d. to 1/6	8d.	..	1/ to 2/	8d.	9d.	..	..	1/4
Milk .. .. per quart ..	2d. to 4d.	3d.	3d.	3d.	4d.	3d. to 4d.	4d. to 6d.	3d.	2d. to 5d.

AVERAGE PRICES OF PRODUCE, LIVE-STOCK, PROVISIONS, ETC., IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1900—*continued*.

Produce, &c.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield).
V. FARM-YARD PRODUCE.									
Geese .. .. per pair ..	5/ to 8/	6/	6/ to 7/6	6/ to 8/	6/	5/ to 9/	7/ to 10	5/6	5/6 to 10/
Ducks .. .. per pair ..	3/ to 5/	4/	2/6 to 3/6	4/	5/	4/6 to 6/6	5/	4/6	3/6 to 5/
Fowls .. .. per pair ..	2/ to 4/	3/6	2/6	2/6 to 3/6	2/6	2/3 to 5/6	3/ to 5/	5/6	3/6
Turkeys .. .. per head ..	3/ to 10/	7/	5/ to 6/	6/ to 9/	5/	4/ to 10/	6/	10/	5/ to 8/
Bacon .. .. per lb. ..	5d. to 7d.	6d.	6d. to 8d.	7d. to 8d.	9d.	6d. to 8d.	9d.	7d.	6d. to 8d.
Ham .. .. per lb. ..	7d. to 9d.	8d.	7d. to 9d.	8d. to 9d.	9d. to 11d.	8d. to 9d.	9d.	8½d.	8d.
Eggs .. .. per doz. ..	10d. to 1/	11d.	9d. to 1/	1/ to 1/4	1/	1/ to 1/6	1/3 to 1/6	10d.	8d. to 1/
VI. GARDEN PRODUCE.									
Potatoes, wholesale .. per ton ..	£3/10 to £6	£2/10	110/ to 130/	£5 to £6	£4	135/ to 200/	£9 to £10	£3 to £4	50/ to 90/
Potatoes, retail .. per cwt. ..	4/ to 6/	4/	7/ to 8/6	6/ to 7/	6/	8/ to 10/	10/	8/6	4/6 to 6/
Onions .. .. per lb. ..	¾d. to 2d.	3d.	2d. to 3d.	2d. to 3d.	1½d.	1d. to 3d.	3d.	2d.	1½d. to 2d.
Carrots .. .. per doz. bnchs.	1/	2/	1/6 to 2/	1/	6d.	1/ to 1/6	1/	8d.	1/ to 1/6
Turnips .. .. per doz. bnchs.	1/	2/	1/6 to 2/	1/	6d.	1/ to 1/6	1/	8d.	1/ to 1/6
Cabbages .. .. per doz. ..	6d. to 1/6	2/	2/	1/6 to 4/	1/6	1/ to 3/	1/	1/	1/6 to 2/
VII. MISCELLANEOUS ARTICLES.									
Tea .. .. .. per lb. ..	1/ to 2/6	2/	1/10 to 2/3	2/	1/10	2/	2/	1/8	1/6 to 2/
Coffee .. .. per lb. ..	1/3 to 2/8	1/10	1/8 to 1/10	1/8 to 1/10	1/10	1/10 to 2/	1/9	1/6	1/6 to 2/
Sugar .. .. per lb. ..	2d. to 2½d.	3d.	3d.	2½d. to 3d.	2½d.	3d.	3d.	2¾d.	2½d. to 3d.
Rice .. .. per lb. ..	2½d. to 3d.	2½d.	2½d. to 3d.	2½d.	2½d.	3d.	3d.	2d.	2d. to 3d.
Salt .. .. per lb. ..	1d.	1d.	1d.	1d.	1d.	1d.	1d.	1d.	1d.
Soap .. .. per cwt. ..	5/ to 15/	10/	9/6 to 21/	9/6 to 25/	24/6	15/ to 20/	15/	17/	12/ to 15/
Candles .. .. per lb. ..	5d. to 10d.	7d.	7d. to 8d.	7d. to 8d.	8d.	8d.	8d.	8d.	5½d. to 7d.
Tobacco .. .. per lb. ..	5/6 to 6/9	6/	5/6	5/6	5/6	5/6	6/	5/6	4/10 to 6/
Coal .. .. per ton ..	£1 to £1/5	£1/16	40/ to 50/	38/ to 40/	38/6	20/ to 34/	22/6 to 34/	£2/10	18/ to 42/
Firewood .. .. per cord ..	14/ to £1	£1/5	25/ to 36/	25/	30/	15/ to 24/	15/ to 22/	25/	20/ to 30/
VIII. BEER, WINE, SPIRITS.									
Beer, colonial .. per bhd. ..	96/ to 101/6	£4/10	90/ to 92/6	£4	£4/10	£4/10	80/ to 82/6	£4	70/ to 75/
Beer, English, bottled per doz. qts. ..	15/ to 18/	17/	14/ to 15/	13/6	14/6	14/ to 15/	14/ to 15/	14/6	13/ to 14/
Brandy .. .. per gallon ..	25/ to 30/	30/	25/ to 27/6	26/ to 29/	28/	25/	25/	28/	25/
Rum .. .. per gallon ..	22/6 to 30/	25/	25/	24/ to 28/	25/6	25/	25/	25/	25/
Whiskey .. .. per gallon ..	23/6 to 45/	30/	27/6	25/ to 26/	31/	25/ to 27/	26/	29/	19/ to 35/
Gin .. .. per gallon ..	30/ to 35/	20/	25/	20/	25/	20/	25/	26/	20/
Wine, Australian .. per gallon ..	12/ to 30/	36/	25/	12/ to 20/	17/6	15/ to 18/	14/ to 15/	15/	14/
Wine, European .. per gallon ..	18/ to 40/	40/	..	17/ to 30/	25/	25/	30/	20/	18/ to 20/

AVERAGE RATES OF WAGES IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1900.

Description of Labour.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marlborough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield)
1. AGRICULTURAL LABOUR.									
Farm-labourers:									
With board, per week	12/ to 20/	15/ to 25/	25/	20/ to 25/	20/	15/ to 30/	15/	15/	15/ to 20/
Without board, per day	5/ to 6/	6/	7/	7/ to 7/6	7/	7/	8/	5/	5/ to 8/
Ploughmen:									
With board, per week	15/ to 20/	25/ to 30/	30/	25/ to 30/	20/	20/	15/	20/	20/ to 22/6
Without board, per day	6/	7/	..	8/	..	..	8/	5/	5/ to 5/9
Harvesters:									
With board, per week	25/ to 50/	50/	..	25/ to 30/	..	40/ to 50/	..	50/	25/ to 45/
Without board, per day	6/ to 9/	10/	1/ per hour	8/	7/	8/	..	10/	9d. to 10d. per hour
Men-cooks on farms:									
With board, per week	15/ to 25/	25/ to 35/	27/6	25/ to 40/	20/	20/	20/	20/	20/ to 30/
Female farm-servants:									
With board, per week	6/ to 15/	10/ to 15/	10/	12/ to 15/	10/ to 12/	6/ to 10/	10/	15/	10/ to 15/
2. PASTORAL LABOUR.									
Shepherds, with board, per annum ..	£39 to £52	£60 to £70	25/ per week	£65 to £80	£65 to £70	£50 to £65	..	£65	£52 to £70
Stock-keepers, with board, per annum ..	£45 to £65	£60 to £70	25/ per week	25/ per week	£65 to £70	£50 to £65	£50	£65	£60 to £70
Station-labourers:									
With board, per week	12/6 to 20/	20/ to 25/	25/	20/ to 25/	20/	15/ to 20/	20/	20/	17/6 to 20/
Without board, per day	6/	6/	..	7/6	..	6/ to 7/	..	..	..
Shearers, with board, per 100 sheep shorn	15/ to 17/6	20/	20/	17/ to 20/	18/4	15/ to 20/	20/	16/8	15/ to 17/6
Men-cooks on stations, with board, per week	20/ to 25/	20/ to 25/	40/	25/ to 35/	20/	20/	20/	20/	25/ to 30/
3. ARTISAN LABOUR (per day, without board).									
Masons	8/ to 14/	9/ to 10/	12/	9/ to 12/6	..	12/ to 14/	12/	10/	11/ to 12/
Plasterers	9/ to 13/	9/ to 10/	12/	9/ to 12/6	12/	8/ to 10/	..	10/	11/ to 12/

AVERAGE RATES OF WAGES IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1900—*continued.*

Description of Labour.	Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marl-b'rough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield).
3. ARTISAN LABOUR (per day, without board)—*continued.*									
Bricklayers	9/ to 14/	9/ to 12/	12/	10/ to 14/	9/ to 10/	12/ to 14/	12/ to 15/	11/	11/ to 12/
Carpenters	8/ to 13/	10/ to 12/	9/	9/ to 10/	10/	10/ to 12/	12/	11/	9/ to 11/
Smiths	7/ to 10/	8/	12/	8/ to 10/	9/	10/ to 12/	10/ to 12/	10/	8/ to 10/
Shipwrights	10/	9/ to 10/	10/	10/ to 13/	..	12/	12/ to 15/	10/	12/
Plumbers	8/ to 12/	10/	10/	10/ to 13/4	9/	10/ to 12/	12/	10/	10/ to 12/
Painters	7/ to 10/	9/ to 11/	9/	8/ to 9/8	8/	8/ to 10/	10/ to 12/	9/	10/ to 12/
Saddlers	8/ to 9/	8/ to 9/	9/	8/	9/	9/ to 10/	12/	8/	8/ to 10/
Shoemakers	6/ to 8/	7/ to 9/	8/	8/	8/	8/ to 9/	8/ to 12/	10/	8/ to 10/
Coopers	9/ to 10/	7/ to 8/	10/	8/ to 11/	15/	10/	..	10/	8/ to 10/
Watchmakers	6/ to 10/	7/ to 8/	10/	8/4 to 10/	10/	8/ to 10/	10/	..	9/ to 10/
Wheelwrights	6/ to 12/	9/ to 10/	10/	8/ to 10/	10/	10/ to 12/	10/ to 12/	10/	8/ to 12/
4. SERVANTS.									
Married couples without family, with board, per annum	£65 to £80	£6 per month	£70	£65 to £80	£75	£75 to £80	..	£75	£70 to £85
Married couples with family, with board, per annum	£65	£8 to £10 per month	£65	£52 to £60	£80	£65 to £75	..	£60	£65 to £75
Grooms, with board, per week	15/ to 30/	£3 to £4 per month	20/	25/ to 30/	20/	20/ to 25/	15/	25/	20/ to 22/6
Gardeners:									
With board, per week	18/ to 30/	20/ to 25/	25/	25/ to 30/	25/	20/ to 25/	..	25/	22/6 to 25/
Without board, per day	6/ to 8/	6/ to 7/	..	7/ to 10/	..	11/	6/	..	6/ to 6/6
Cooks, with board, per week	10/ to 25/	25/ to 30/	22/6	15/ to 30/	25/	15/	20/ to 25/	£40 per ann.	15/ to 20/
Laundresses, with board, per week	12/ to 20/	20/	15/	15/ to 20/	20/	12/	15/ to 25/	£40 „	12/ to 20/
General house servants, with board, per week	4/ to 15/	5/ to 15/	12/	10/ to 15/	12/6	7/ to 12/	10/6–12/6	£30 „	10/ to 15/
Housemaids, with board, per week	6/ to 14/	12/6 to 15/	13/	10/ to 15/	10/	12/	12/6 to 15/	£26 „	10/ to 15/
Nursemaids, with board, per week	3/ to 7/	5/	7/	7/ to 10/	7/6	5/	5/ to 6/	£25 „	4/ to 7/

AVERAGE RATES OF WAGES IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1900—*continued.*

Description of Labour.	Auckland.	Taranaki.	Hawke's Bay.	Wellington	Marlb'rough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield).
4. SERVANTS—*continued.*									
Needlewomen:									
With board, per week	15/ to 24/	15/ to 20/	..	24/ to 25/	..	..	18/	..	11/ to 15/
Without board, per day (lunch always provided)	2/6 to 5/	5/	3/6	3/ to 5/	5/	4/	4/	..	2/6 to 4/
5. MISCELLANEOUS.									
General labourers, without board, per day	6/ to 8/	7/	7/	7/ to 8/	7/	7/ to 9/	6/ to 9/	6/	6/ to 8/
Stonebreakers without board, per cubic yard	2/9 to 6/	4/	..	4/	..	5/	4/6 to 5/	3/	2/ to 4/
Seamen, with board, per month ..	£6 to £9	£6 to £8	£7	£6 to £7	..	£6	£6	£6	£6/10–£8/10
Miners, without board .. per day	7/6 to 12/	8/	..	..	8/ to 10/	9/	10/	8/	10/
Engine-drivers, without board, per day	6/ to 12/	8/ to 10/	11/6	9/ to 11/	9/ to 10/	10/ to 11/8	10/ to 12/	12/	11/ to 12/
Tailors, " per day	..	7/ to 8/	..	8/ to 10/	10/	9/ to 10/	..	12/	8/ to 10/
" " per week	25/ to 65/	..	50/	..	..	..	55/	..	..
Tailoresses, " per day	..	2/6 to 3/6	..	4/ to 5/	7/	2/6 to 4/	..	6/	4/6
" " per week	14/ to 30/	..	22/6	..	..	..	30/	..	..
Dressmakers, " per day	..	3/ to 5/	..	4/ to 5/	7/	5/	..	5/	..
" per week	10/ to 25/	..	25/	..	..	..	15/ to 20/	..	12/ to 15/
Milliners, " per day	..	4/ to 4/6	..	4/ to 8/	..	5/ to 7/	..	5/	..
" " per week	15/ to 40/	..	27/6	..	40/	..	50/	..	23/ to 30/

AVERAGE RATES OF WAGES IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING THE YEAR 1900—*continued.*

Description of Labour.		Auckland.	Taranaki.	Hawke's Bay.	Wellington.	Marl-b'rough.	Nelson.	Westland (Goldfield).	Canterbury.	Otago (Part Goldfield).
5. MISCELLANEOUS—*continued.*										
Machinists, without board,	per day	..	4/ to 5/	..	4/ to 5/	..	5/	..	6/	..
" "	per week	15/ to 25/	..	22/6	..	30/	..	25/	..	20/
Storekeepers, "	per day	..	..	..	6/ to 8/	..	..	..	8/6	..
" "	per week	50/	30/ to 40/	80/	..	50/	50/ to 60/	40/	..	70/
" assistants, "	per day	..	..	..	4/ to 6/	..	..	..	6/6	..
" " "	per week	30/ to 35/	25/ to 30/	50/	..	30/	30/	40/	..	15/ to 20/
Drapers' assistants, "	per day	..	..	..	6/	..	..	..	10/	..
" "	per week	30/ to 35/	30/ to 40/	50/	..	40/	30/ to 60/	40/	..	45/ to 50/
Grocers' assistants, "	per day	..	..	..	6/	..	..	..	6/6	..
" "	per week	35/	25/ to 35/	50/	..	35/	20/ to 30/	40/	..	40/ to 50/
Butchers, "	per day	..	..	..	7/ to 9/	..	..	..	8/6	..
" "	per week	35/ to 50/	25/ to 40/	50/	..	40/	45/ to 60/	50/ to 60/	..	40/ to 50/
Bakers, "	per day	..	8/	..	..	..	..	..	9/6	..
" "	per week	15/ to 70/	..	50/	45/ to 50/	50/	45/ to 50/	40/ to 60/	..	32/ to 40/
Storemen, "	per day	..	..	..	..	..	..	..	6/6	..
" "	per week	30/ to 40/	30/ to 40/	40/	40/ to 50/	42/	40/ to 70/	40/ to 50/	..	4 2/ to 50/
Compositors, "	per day	..	..	..	..	..	..	..	10/	..
" "	per week	40/ to 55/	30/ to 45/	60/	50/	55/	40/ to 50/	40/ to 60/	..	50/ to 60/

Labour Legislation.

The legislation passed by the General Assembly of New Zealand, and termed the "Labour Laws," comprises the undermentioned statutes and regulations made under various Acts:—

Bankruptcy: Sections 112 and 120 of Act of 1892.
"The Companies Acts Amendment Act, 1893": Sections 8 and 9.
"The Conspiracy Law Amendment Act, 1894."
"The Contractors' and Workmen's Lien Act, 1892."
"The Deaths by Accident Compensation Act, 1880," sections 2 and 4 to 10.
"The Employers' Liability Act, 1882," with amendments of 1891 and 1892.
"The Factories Act, 1894," and Amendment Act, 1896.
"The Employment of Boys or Girls without Payment Prevention Act, 1899" (read as part of "The Factories Act, 1894").
"The Industrial Conciliation and Arbitration Act, 1894," with amendments, 1895, 1896, 1898, and Consolidation Act with amendments of 1900.
The Inspection of Machinery Acts, 1882, 1883, and Amendment Acts of 1894, 1896, and 1900.
"The Kauri-gum Industry Act, 1898," and Amendment Act, 1899.
"The Labour Day Act, 1899."
Labour in Coal-mines: Extract from "The Coal-mines Act, 1891."
Labour in Coal-mines: Regulations for the management and administration of funds and moneys under section 69 of "The Coal-mines Act, 1891."
"The Licensing Act, 1881," section 13.
"The Master and Apprentice Act, 1865." Master and Apprentice: Extract from "The Criminal Code Act, 1893," sections 150 and 213.
"The Mining Act, 1898," and Amendment Acts, 1899 and 1900.
"The Public Contracts Act, 1900."
"The Servants' Registry Offices Act, 1895."
"The Shearers' Accommodation Act, 1898."
"The Shipping and Seamen's Act, 1877," with Amendment Acts of 1885, 1890, 1894, 1895, 1896, and 1899.
"The Shops and Shop-assistants Act, 1894," with Amendment Acts of 1895 and 1896.
"The Sunday Labour in Mines Prevention Act, 1897."
"The Trade-Union Act, 1878," and Amendment Act, 1896.
"The Truck Act, 1891."
"The Wages Protection Act, 1899" (forming part of and to be read with "The Truck Act, 1891").
"The Wages Attachment Act, 1895."
"The Workers' Compensation for Accidents Act, 1900."
"The Workmen's Wages Act, 1893."

These Acts and regulations are published in pamphlet form by the Department of Labour, with general remarks by the Secretary, which are quoted as important:—

The labour laws have been passed in the effort to regulate certain conditions affecting employer and employed. Their scope embraces many difficult positions into which the exigencies of modern industrial life have forced those engaged in trades and handicrafts. The general tendency of these laws is to ameliorate the position of the worker by preventing social oppression through undue influences, or through unsatisfactory conditions of sanitation. It will undoubtedly be found that, with the advance of time, these laws are capable of improvement and amendment; but they have already done much to make the lives of operatives of fuller and more healthy growth, and their aim is to prevent the installation of abuses before such abuses attain formidable dimensions.

The manufacturing population in New Zealand differs from that in some other of the Australasian Colonies by its wide dispersion. The capital city has hitherto been unable to draw to itself the industrial ability of the other provincial centres; and not only do Auckland, Christchurch, and Dunedin vie with

Wellington as centres of population, but also as *nuclei* of commercial activity. In the second-class towns, such as Nelson, Napier, Invercargill, &c., many important works are being carried on, while even in the villages and rural districts the progress of new settlement necessitates the manufacture of articles which in older communities are produced in specialised localities. Men scattered widely at the numerous occupations of colonial country life, shearing, harvesting, bush-felling, road-making, or sailing coastal vessels, &c., require legal protection against the dangers and disabilities to which their callings expose them. This general dispersion of industry necessitates not only a wide system of supervision, but legislative measures of a peculiar character, at once sufficiently elastic to comprehend many varieties of function, and yet rigid to crush any apparent abuse.

The most important of these laws, in its general significance, is that dealing with compulsory arbitration in labour disputes. "The Industrial Conciliation and Arbitration Act, 1894" (with its amending Acts of 1895, 1896, and 1898), were consolidated and further amended by the Act of 1900 now in force, and which is for the purpose of encouraging industrial association, and to facilitate the settlement of trade difficulties. Societies consisting of two or more employers, or of seven or more workers, may be registered and become subject to the jurisdiction of the Board and Court appointed by the Act. Any such society may bring a disputed case before the Board of Conciliation appointed for that district, and, if the Board fails to effect a settlement, the dispute may be referred to the Court of Arbitration, whose award may be enforced in the same manner as an award of the Supreme Court. The amount, however, for which such an award may be enforced against an association is limited to £500.

"The Factories Act, 1894," is a consolidation of previous legislation, with some important additions. New Zealand has been divided into factory districts under the charge of a Chief Inspector and 150 local Inspectors. As a "factory" or "work-room" includes any place in which two or more persons are engaged in working for hire or reward in any handicraft, there are few operatives who do not come within the scope of the Act. Children under fourteen years of age are not allowed to be employed, and the hours of labour, holidays, &c., of women and youths under sixteen are strictly regulated. Good ventilation, sanitary accommodation, and general cleanliness of buildings are points dwelt upon; while machinery has to be properly guarded, fire-escapes provided, and dangerous occupations especially classified. In order to assist the system of free general education which prevails in the colony, young persons are not allowed to work in factories till they have passed the Fourth Standard of the State schools, or an equivalent examination. To prevent the introduction of "sweating" into our commercial centres, articles made, or partly made, in private dwellings, or unregistered workshops, have to be labelled when offered for sale, so that goods so manufactured (often in unsanitary premises) may not be placed in the market in competition with work done in properly inspected factories. Any person removing such labels is liable to a heavy fine. The Factory Inspectors also exercise supervision over the sleeping accommodation provided for shearers in country districts. As the sheep-runs and farms are widely scattered, sometimes in the rough and remote back-country, this part of the work of inspection is no easy task. A woman Inspector of Factories also gives her assistance to the duties of the department, travelling from place to place, and particularly looking into the condition of the operative women and girls. [There is also an Amendment Act of 1896.]

The duration of the hours of business in shops is limited by "The Shops and Shop-assistants Act, 1894," and "The Shops and Shop-assistants Act Amendment Act, 1895." These provide for the closing of all shops in towns and boroughs for one afternoon half-holiday in each week. A few shops, such as those of chemists, fruiterers, eating-house keepers, &c., are exempted from the general closing on account of their convenience to the public; but assistants in such establishments, in the bars of hotels, and in country stores, must have a half-holiday on some day of the week. Very small shops carried on by Europeans without paid assistants are also exempt from closing on the general half-holiday, but must close on one afternoon in each week. The hours of work

for women and young persons are defined; sitting accommodation must be provided, and precautions as to the necessary time for meals, sanitary accommodation, &c., are enforced; the Act also enumerates the working-hours, holidays, &c., of clerks employed in banks, mercantile offices, &c. [There is also an Amendment Act of 1896.]

"The Employers' Liability Act, 1882," added to and amended in 1891 and 1892, is designed to protect workmen from negligence on the part of employers, by defining under what circumstances compensation for injury or death may be recoverable. The Act covers all employments except that of domestic servant, and does not allow of any "contracting out" by agreement on the part of employer and employed. Another Act of this character has regard to the payment of workmen's wages, and states that if a workman shall demand payment of wages twenty-four hours or more after they are due, and the contractor does not pay such wages, the workman may legally attach all moneys due to the contractor by the employer until such wages are paid. "The Truck Act, 1891," requires that payment of wages shall not be made in goods or "truck," but in money, any contra account notwithstanding; but there are a few exemptions, such as for advances for food, tools, &c., to men engaged in felling bush. In order to minimise the number of cases wherein fraudulent or unfortunate contractors victimised their labourers, "The Contractors' and Workmen's Lien Act 1892," was brought into existence. This entitles a person who has done work upon any land, building, or chattel to a lien upon such property. The lien is only to be exercised under certain restrictions, and for a limited amount, but it gives priority of claim for wages against other service, and enables legal proceedings for recovery to be taken before the attached property can be disposed of or alienated.

"The Servants' Registry Offices Act, 1895," regulates the licensing of registry offices for domestic or farm servants. It prevents friendless or uneducated people from becoming the prey of unscrupulous persons, who formerly collected fees by duping the applicants for situations. The registry-office keepers have to pay a licensing fee to the Government, and to present a certificate of good character when applying for a license. Proper ledgers and books open to inspection must be provided, and the lending or hiring of licenses is not permitted. Registry-office keepers are not allowed to keep lodging-houses for servants, or have any interest in such houses.

There are sundry Acts for the supervision of shipping, and the protection of sailors and passengers. They relate to the appointment of pilots and ships' officers; the engagement and discharge of sailors; the sanitation, ventilation, and overloading of vessels; and the number of duly rated hands engaged in proportion to tonnage. They endeavour to prevent injustice to the sailor as to advance-notes, or payments in foreign money, and also specify penalties to be inflicted for desertion, disobedience, &c.

Combinations or associations of persons for regulating the relations between masters and masters, or masters and workmen, or workmen and workmen, are directed by "The Trade Union Act, 1878." In this Act the different statutes which do not apply to trade-unions (such as the Joint Stock Act, the Friendly Societies Act, &c.) are enumerated, and the manner in which such societies may register, hold property, &c., is set out, together with the necessary provisions as to returns, penalties, &c. [An Amendment Act was passed in 1896, altering the age of membership.] "The Conspiracy Law Amendment Act, 1894," permits any combination of persons in furtherance of a trade dispute, provided that any act performed by such combination or society would not be unlawful if done by one person. Such action must not include riot, sedition, or crime against the State.

"The Wages Attachment Act, 1895," prevents wages below £2 a week being attached for debt. It does not interfere with any workman being sued for debt in the ordinary course, but prevents a grasping creditor from stepping in before others and seizing wages in advance before they are earned. [There is also "The Wages Protection Act, 1899," which has to be read with "The Truck Act, 1891," previously alluded to.]

"The Master and Apprentice Act, 1865," applies mainly to the indenturing of apprentices by the State, such apprentices being children of destitute parents.

In other respects the law of England is held to be the law governing the relations between masters and apprentices in this colony; but special sections of the Act apply to the punishment of apprentices for absenting themselves from duty, and to the fine on a master for neglecting or ill-using his apprentice.

"The Mining Act, 1898," consolidates and repeals all statutes of a similar nature, and includes various amendments suggested by the Conference of Wardens of goldfields, and by mining associations. The mining legislation refers to labour in any kind of mine, and deals with the position of tributers and wagesmen, the examination for certificates for mine-managers, &c., provision for ventilation, precautions against accident by blasting, &c. [There are Amending Acts of 1899 and 1900.]

In or about coal-mines women and boys are not allowed to be engaged. There is provision for the appointment of inspectors, mine-managers, engine-drivers, &c., and rules are furnished as to the ages and working-hours of those employed in attending engines, machinery, winding-gear, &c. The ventilation of mines is provided for, and the necessary safeguards imposed as to blasting operations, working in foul air, protecting lights, &c. There are regulations for the management and administration of funds and moneys, which relate chiefly to the withdrawal of moneys from the Sick and Accident Fund, and returns demanded from trustees of the fund.

There is also "The Deaths by Accident Compensation Act, 1880."

"The Mining Act Amendment Act, 1900," section 8, provides that where workmen are employed in a mine, or any of the workmen employed in a mine are members of a society formed in connection with the mining industry and registered under "The Industrial Conciliation and Arbitration Act, 1894," such workmen or society may appoint two of their number to inspect the machinery and workings once a month at least. The inspecting workmen shall make a full report of the result of the inspection, and furnish a copy to the mine-owner or manager, who shall cause the same to be recorded in a book kept at the mine, and the said book shall be open for inspection to any Inspector of Mines, or workman employed in the mine, or officer of the aforesaid society.

"The Public Contracts Act, 1900," provides that any person entering into a contract exceeding the value of twenty pounds, with the Government, any Education Board, Harbour Board, or local authority, and employing skilled or unskilled manual labour in the execution of such contract, shall be bound to pay wages at the rate ruling in the locality of the work, but in no case lower than the rates fixed by the Arbitration Court. The maximum length of the working day on any public contract is not to exceed eight hours. A penalty, not exceeding ten pounds, is recoverable by summary proceedings for every breach of the provisions of the Act.

Co-operative Public Works.

Remarks on the co-operative system of constructing public works were given in a special article in the Year-book of 1894. The numbers of workmen employed in this manner under Government departments during the financial year 1900–1901 were :—

		Lands and Survey Department.	Public Works Department.	Nurseries.	Total.
April,	1900	1,544	1,257	51	2,852
May,	"	1,470	1,514	50	3,034
June,	"	1,537	1,603	53	3,193
July,	"	1,604	1,742	57	3,403
August,	"	1,683	1,889	84	3,656
September,	"	1,659	2,062	97	3,818
October,	"	1,624	2,197	78	3,899
November,	"	1,688	2,273	69	4,030
December,	"	1,778	2,397	55	4,230
January,	1901	1,812	2,591	60	4,463
February,	"	2,181	2,675	83	4,939
March,	"	2,434	2,877	92	5,403

The average number of men employed in each year was as follows:—

Year.	Lands and Survey Department.	Public Works Department.	Total.
1891–92	261	527	788
1892–93	280	842	1,122
1893–94	933	1,015	1,948
1894–95	1,103	962	2,065
1895–96	1,572	764	2,336
1896–97	1,459	854	2,313
1897–98	1,552	890	2,442
1898–99	1,613	1,194	2,807
1899–1900	1,825	1,243	3,068
1900–1901	1,820	2,090	3,910
Gross totals	12,418	10,381	22,799
Average ..	1,242	1,038	2,280

Labour Department.

The total number of men for whom employment has been found by the Department of Labour up to the end of March, 1901, is given below. The statement also exhibits the number of persons dependent upon the men assisted:—

	Men.	Dependents.
June, 1891, to 31st March, 1892	2,598	4,729
1st April, 1892, to 31st March, 1893 ..	3,874	7,802
1st April, 1893, to 31st March, 1894 ..	3,371	8,002
1st April, 1894, to 31st March, 1895 ..	3,030	8,883
1st April, 1895, to 31st March, 1896 ..	2,871	8,424
1st April, 1896, to 31st March, 1897 ..	1,718	4,719
1st April, 1897, to 31st March, 1898 ..	2,035	4,928
1st April, 1898, to 31st March, 1899 ..	2,115	4,759
1st April, 1899, to 31st March, 1900 ..	2,147	4,471
1st April, 1900, to 31st March, 1901 ..	3,124	5,432
	26,878	62,149

SECTION IX.—TRANSPORT AND COMMUNICATION.

Shipping.

The shipping entered inwards during 1900 comprised 616 vessels, of 854,632 tonnage; while entered outwards were 613 vessels, of 825,275 tons. Comparison with the figures for the previous year shows in the entries an increase of 7 vessels and 43,449 tons, and in the clearances an increase of 9 vessels and 17,409 tons. Of the vessels inwards, 156, of 392,394 tons, were British; 393, of 392,519 tons, colonial; and 67, of 69,719 tons, foreign. Those outwards numbered 149, of 368,241 tons, British; 397, of 388,436 tons, colonial; and 67, of 68,598 tons, foreign. Compared with the figures for 1899 there was an increase of 7 vessels and 41,533 tonnage in British vessels entered, and an increase in the colonial shipping entered of 5 vessels, but a decrease of 152 tons. Foreign shipping shows a decrease of 5 in the number of vessels entered, but an increase of 2,468 tons. Of the entries in 1900, 245, of 126,051 tons, were sailing-vessels, and 371, of 728,581 tons, steamers. Of the clearances, 259, of 137,202 tons, were sailing-vessels, and 354, of 688,073 tons, steamers. The shipping inwards and outwards for ten years is given in the table following:—

Vessels entered, 1891-1900.

Year.	Total Number.			British.			Colonial.			Foreign.		
	Vessels.	Tons.	Crews.	Vessels.	Tons.	Crews.	Vessels.	Tons.	Crews.	Vessels.	Tons.	Crews.
1891 ..	737	618,515	21,889	169	265,164	6,817	507	291,800	12,951	61	61,551	2,121
1892 ..	686	675,223	22,038	203	335,577	8,274	411	265,769	11,303	72	73,877	2,461
1893 ..	617	615,604	20,935	166	290,323	7,289	405	272,250	11,745	46	53,031	1,901
1894 ..	609	631,100	21,834	141	271,994	6,456	423	306,547	13,279	45	52,559	2,099
1895 ..	611	672,951	22,074	146	299,667	6,837	420	319,313	13,209	45	53,971	2,028
1896 ..	589	614,097	19,857	126	249,601	5,495	395	300,176	12,210	68	64,320	2,152
1897 ..	600	686,899	21,542	133	276,020	6,086	395	340,793	13,138	72	70,086	2,318
1898 ..	620	765,255	24,081	152	329,065	7,910	399	369,840	13,897	69	66,350	2,274
1899 ..	609	811,183	23,929	149	350,861	6,986	388	392,671	14,666	72	67,651	2,277
1900 ..	616	854,632	23,791	156	392,394	7,183	393	392,519	14,135	67	69,719	2,473

Vessels cleared, 1891-1900.

1891 ..	744	625,807	22,080	168	271,533	7,002	515	291,938	12,947	61	62,336	2,131
1892 ..	689	656,100	21,679	189	315,633	7,934	424	263,504	11,241	76	76,963	2,504
1893 ..	635	642,466	21,448	186	317,130	7,839	400	270,308	11,665	49	55,028	1,944
1894 ..	614	631,250	21,934	140	270,464	6,437	432	310,050	13,527	42	50,736	1,970
1895 ..	597	648,946	21,619	134	281,840	6,528	420	315,171	13,068	43	51,935	2,023
1896 ..	592	627,659	20,217	123	259,064	5,637	402	305,926	12,448	67	62,669	2,132
1897 ..	587	675,333	21,409	140	280,229	6,240	378	327,068	12,881	69	68,036	2,288
1898 ..	622	765,793	24,130	150	322,150	7,898	403	377,102	13,948	69	66,541	2,284
1899 ..	604	807,866	24,117	152	355,442	7,194	379	386,219	14,656	73	66,205	2,267
1900 ..	613	825,275	23,481	149	368,241	6,978	397	388,436	14,153	67	68,598	2,350

Note.—Coasting-vessels are not included in the above table.

The noticeable feature in the operations for the decennium is a considerable increase of tonnage inwards and outwards, but decrease in the numbers of vessels, showing that larger ships are now used than those of ten years ago.

The figures given apply to the external trade only; but in a new country such as New Zealand, as yet deficient in roads, but having an extensive seaboard and a number of good harbours, the coastal trade must be relatively very large, as is evidenced by the figures next given:—

SHIPPING ENTERED COASTWISE, 1900.

	Number.	Tons.
Sailing-vessels	4,535	300,376
Steamers	16,374	6,571,977

SHIPPING CLEARED COASTWISE, 1900.

	Number.	Tons.
Sailing-vessels	4,562	300,480
Steamers	16,300	6,570,175

The total number of vessels entered coastwise was thus 20,909, of 6,872,353 tons, a decrease of 445 vessels, but an increase of 239,419 tons on the figures for 1899. The total clearances coastwise were 20,862 vessels, of 6,870,655 tons, a decrease of 430 vessels, but an increase of 227,748 tons on the number for the previous year.

REGISTERED VESSELS.

The number and tonnage of the registered vessels belonging to the several ports on the 31st December, 1900 (distinguishing sailing-vessels and steamers), was as under:—

REGISTERED VESSELS, 31ST DECEMBER, 1900.

Ports.	Sailing-vessels.			Steam-vessels.		
	Vessels.	Gross Tonnage.	Net Tonnage.	Vessels.	Gross Tonnage.	Net Tonnage.
Auckland	169	16,486	15,784	87	11,959	7,230
Napier	8	824	801	18	1,583	865
Wellington	24	4,944	4,777	25	4,546	2,585
Nelson	7	180	180	10	820	516
Lyttelton	27	4,526	4,407	8	2,087	841
Dunedin	48	14,394	14,099	68	72,803	44,378
Invercargill	18	2,231	2,149	3	390	133
Totals	301	43,585	42,197	219	94,182	56,498

RAILWAYS.

The history and progress of railways in New Zealand was specially described in the Year-book of 1894, as was also the line partly built by the New Zealand Midland Railway Company. An account of the line belonging to the Wellington and Manawatu Railway Company was published in the Year-book for 1895.

The length of Government railways open for traffic on the 31st March, 1901, was 2,212 miles, of which 829 were situated in the North Island and 1,383 in the Middle Island.

The sections of the North Island lines consist of the Kawakawa, 8 miles; Whangarei, 23; Kaihu, 17; Auckland, 330; and the Wellington–Napier–New Plymouth, 451 miles. The Middle Island sections comprise the Hurunui–Bluff, with branches, 1,186 miles; Westland, 112; Westport, 31; Nelson, 33; Picton, 21 miles. The total cost of construction has been £17,207,328 (besides £1,022,729 spent on unopened lines), and the average cost per mile £7,779.

The following statement shows the number of miles of Government railways open, the number of train-miles travelled and of passengers carried, and the tonnage of goods traffic, for the past eleven years:—

Year.	Length open.	Train-mileage.	Passengers.	Season Tickets issued.	Goods and Live-stock.*
					Tons.
1890–91	1,842	2,894,776	3,433,629	13,881	2,134,023
1891–92	1,869	3,010,489	3,555,764	16,341	2,122,987
1892–93	1,886	3,002,174	3,759,044	16,504	2,258,235
1893–94	1,948	3,113,231	3,972,701	17,226	2,128,709
1894–95	1,993	3,221,620	3,905,578	28,623	2,123,343
1895–96	2,014	3,307,226	4,162,426	36,233	2,175,943
1896–97	2,018	3,409,218	4,439,387	43,069	2,461,127
1897–98	2,055	3,666,483	4,672,264	48,660	2,628,746
1898–99	2,090	3,968,708	4,955,553	55,027	2,744,441
1899–1900 ..	2,104	4,187,893	5,468,284	63,335	3,251,716
1900–1901 ..	2,212	4,620,971	6,243,593	82,921	3,461,331

The traffic in local products for the past eleven years was:—

Year.	Wool.	Timber.	Grain.	Minerals.	Horses and Cattle.	Sheep and Pigs.
	Tons.	Tons.	Tons.	Tons.	Number.	Number.
1890–91 ..	87,701	153,078	528,683	828,079	44,999	1,313,155
1891–92 ..	85,888	170,521	442,277	873,899	47,618	1,117,253
1892–93 ..	96,842	169,910	523,637	884,031	46,590	1,359,860
1893–94 ..	101,340	183,192	411,191	864,538	51,573	1,394,456
1894–95 ..	103,328	198,578	388,556	857,917	52,075	1,563,213
1895–96 ..	99,363	213,132	374,699	878,659	50,766	1,893,058
1896–97 ..	98,958	257,825	423,888	1,032,252	47,256	2,016,437
1897–98 ..	103,055	313,073	427,448	1,048,868	54,871	2,399,379
1898–99 ..	97,396	310,266	420,071	1,147,353	66,226	2,552,745
1899–1900 ..	104,621	334,677	764,033	1,218,698	76,537	2,559,836
1900–1901 ..	96,519	380,803	772,571	1,366,241	84,289	2,463,250

* The equivalent tonnage for live-stock has been given.

The cash revenue for the year 1900–1901 amounted to £1,727,236; and the total expenditure to £1,127,847. The net

cash revenue—£599,389—was equal to a rate of £3 9s. 8d. per cent. on the capital cost; the percentage of expenditure to revenue was 65·30. The earnings on some of the lines ranged as high as £5 17s. 3d., and even £13 7s. 4d., per cent.

The particulars of the revenue and expenditure for the past eleven years are given herewith :—

Year.	Passenger Fares.	Parcels Luggage and Mails.	Goods and Live-stock.	Rents and Miscellaneous.	Total.	Expenditure.	Net Revenue.	Percentages of Expenditure to Revenue.	Percentages of Revenue to Capital Cost.		
	£	£	£	£	£	£	£	%	£	s.	d.
1890-91	353,593	38,997	690,779	38,332	1,121,701	700,703	420,998	62·47	2	18	11
1891-92	364,617	41,795	671,469	37,550	1,115,431	706,517	408,914	63·34	2	15	9
1892-93	390,619	44,801	707,785	38,316	1,181,521	732,141	449,380	61·97	3	1	0
1893-94	402,019	45,206	686,469	39,098	1,172,792	735,358	437,434	62·70	2	17	9
1894-95	385,149	43,270	683,726	38,706	1,150,851	732,160	418,691	63·62	2	14	6
1895-96	389,234	54,736	698,115	40,956	1,183,041	751,368	431,673	63·51	2	16	0
1896-97	410,160	58,084	774,163	43,751	1,286,158	789,054	497,104	61·35	3	3	10
1897-98	433,430	60,872	837,589	44,117	1,376,008	857,191	518,817	62·30	3	4	10
1898-99	475,553	66,418	882,077	45,617	1,469,665	929,737	539,928	63·26	3	5	10
1899-00	515,020	68,488	985,723	54,660	1,623,891	1,052,358	571,533	64·80	3	8	5
1900-01	544,976	72,712	1,051,694	57,854	1,727,236	1,127,847	599,389	65·30	3	9	8

NOTE.—For 1895-96 and subsequent years the railways have been credited with the value of services performed for other Government departments, and debited with the value of work done for the railways by other departments.

The average revenue per mile of railway was £794 10s. 2d., and the average expenditure £518 16s. 0d.; equal to 7s. 5¾d. and 4s. 10½d. per train-mile respectively.

The total number of miles travelled by trains were 4,620,971.

In addition to the above railways, there were 88 miles of private lines open for traffic on the 31st March, 1901—namely, the Wellington–Manawatu Railway, 84 miles; and the Kaitangata Railway Company's line, 4 miles.

The cost of the construction of the Wellington–Manawatu Railway was £763,408, being at the rate of £9,088 per mile. The term "cost of construction," as applied to railways, includes value of equipment, rolling-stock, &c., not merely the road-line and buildings. The revenue for the twelve months ended the 28th February, 1901, amounted to £96,270, and the working-expenses to £46,562, equivalent to 48·36 per cent. of the revenue.

Australasian Railways.

The following statement gives the number of miles of Government railways open for traffic and in course of construction in the Australaian Colonies in 1899–1900 :—

Railways (State only).

Colonies.	Year ended	No. of Miles of Line open at end of Year.	No. of Miles of Line in course of Construction.	Train Miles Run.	Cost of Construction of Open Lines.	Gross Receipts.	Working Expenses.	Percentage of Net Revenue to Cost.	Number of		
									Locomotives.	Vehicles.	
										Passenger.	Goods and Live-stock.
					£	£	£	%			
Queensland ..	31 Dec., 1899	2,800	..	6,065,930	19,110,725	1,373,076	844,101	2·77	327	385	5,920
New South Wales	30 June, 1900	*2,811½	303½	8,894,352	38,477,269	3,163,572	1,769,520	3·62	489	1,025	9,880
Victoria ..	30 June, 1899	3,127	74¾	9,714,298	38,974,410	2,873,729	1,797,726	2·76	518	1,129	9,618
South Australia	30 June, 1899	1,723¾	..	3,899,061	12,886,359	1,058,397	617,380	3·42	336	372	6,196
Ditto, Northern Territory ..	30 June, 1899	145½	..	30,657	1,155,684	14,758	17,375	−0·23	6	7	134
Western Australia	30 June, 1900	1,355	..	4,216,161	6,856,363	1,259,512	861,470	5·81	233	260	4,777
Tasmania ..	31 Dec., 1899	†445¼	18	806,089	‡3,604,222	193,159	152,798	1·12	67	164	1,185
New Zealand ..	31 Mar., 1900	2,104	111	4,187,893	16,703,887	1,623,891	1,052,358	3·42	304	577	10,295

* Includes 40 miles rented to the Silverton Tramway Company. † Includes 7½ miles private line worked by Government.
‡ State railways only

In addition to the Government lines open for traffic in 1900, New South Wales had 84½ miles of private railway; South Australia, 20 miles; Western Australia, 495 miles; Tasmania, 78 miles, 7½ miles of which are worked by Government; and New Zealand, 88 miles.

Postal and Electric Telegraph.

There were 1,686 post-offices in New Zealand at the end of 1900. The number of letters, letter-cards, post-cards, books, and pattern-packets, newspapers, and parcels dealt with during the year, compared with the number handled in 1899, was as under:—

	Total Number dealt with. 1900.	1899.	Increase.
Letters	38,662,296	37,380,671	1,281,625
Letter-cards	1,236,183	1,103,700	132,483
Post-cards	1,908,515	1,643,051	265,464
Books and pattern-packets	17,715,402	17,659,858	55,544
Newspapers	17,045,715	15,717,388	1,328,327
Parcels	233,456	223,350	10,106

The average number of letters, &c., posted per head of the population in each of the past six years was,—

	1895.	1896.	1897.	1898.	1899.	1900.
Letters and letter-cards	39·87	40·77	42·98	45·34	47·77	49·01
Post-cards	1·73	1·65	1·84	1·90	2·12	2·43
Books and parcels	12·27	17·19	17·36	19·72	21·68	21·10
Newspapers	12·95	13·47	14·10	14·77	15·13	16·17

The facilities afforded for the transmission of parcels through the Post Office to places within and without the colony have proved of much convenience to the public. The regulations admit of parcels up to 11 lb. in weight being sent to almost all the important countries of the world.

The following table shows the number of parcels exchanged with the United Kingdom, the Australian Colonies, &c., in 1899 and 1900:—

Country.	Number of Parcels. Received. 1899.	Received. 1900.	Despatched. 1899.	Despatched. 1900.
United Kingdom and foreign countries *viâ* London	19,719	21,682	4,524	4,690
United States	..	898	..	395
Hawaii	56	24	24	14
Vancouver	132	147	67	89
Victoria	3,235	3,540	1,346	1,322
New South Wales	5,691	6,229	1,975	1,809
South Australia	258	224	194	191
Queensland	327	308	293	267
Tasmania	152	143	315	312
Western Australia	244	260	266	262
Samoa	14	15	213	128
Rarotonga	10	19	70	65
Fiji	29	36	109	139
Norfolk Island	..	..	..	1
Ceylon	340	382	166	165
Uruguay	..	..	14	15
Cape Colony	..	309	..	707
Transvaal	..	..	..	345
Totals	30,207	34,236	9,576	10,916

The declared value of the parcels received from places outside the colony was £87,662, on which the Customs duty amounted to £16,642 11s. 6d.

The number and weight of parcels dealt with in 1890, 1895, 1896, 1897, 1898, 1899, and 1900 are given. The word "parcels" in the first-named table includes the parcels herein mentioned:—

—	1890.	1895.	1896.	1897.	1898.	1899.	1900.
Parcels, No.	136,327	176,206	186,611	197,554	204,603	223,350	233,456
Weight, lb.	380,521	582,193	654,333	676,054	698,301	765,836	794,994

Money Orders and Postal Notes.

The number of offices open for the transaction of money-order business at the end of 1900 was 454.

During 1900, 369,834 money-orders, for a total sum of £1,214,852 16s. 5d., were issued at the various post-offices in the colony. The money-orders from places beyond New Zealand and payable in the colony numbered 25,613, for the amount of £95,318 15s. 9d.

The number of offices open for the sale of postal notes at the end of 1900–1901 was 529: 490,505 postal notes were sold, value £154,434 1s. 0d. (including £3,255 19s. 9d. commission).

The notes paid numbered 486,553, value £153,586 12s. 0d.

Mail-services.

The cost of the various mail-services between England and New Zealand was, in 1900, as follows:—

San Francisco Service.	1900. £ s. d.
Payments—	
Subsidies, &c.	28,770 0 8
Interprovincial and other charges ..	4,818 17 11
	£33,588 18 7
Receipts—	
Postages received from England and the Australian Colonies	9,944 10 7
Postages collected in the colony	12,840 12 4
	£22,785 2 11
Loss to the colony	£10,803 15 8

Peninsular and Oriental and Orient Lines Services.	£ s. d.
Payments—	
To P. and O. and Orient Lines	5,774 16 4
Transit across Australia	414 12 9
" European Continent ..	666 9 7
Intercolonial services	2,184 12 4
	£9,040 11 0

Receipts—	£	s.	d.
Postages collected from England and from foreign offices	1,088	16	8
Postages collected in the colony	5,085	14	4
	£6,174	11	0
Loss to the colony	£2,866	0	0

The total amount of postages collected and contributions received for these services in 1900 was £28,959 13s. 11d.

The average number of days in 1900 within which the mails were delivered between London and each of the under-mentioned ports in New Zealand was:—

London to—	San Francisco Service.	P. and O. Line.	Orient Line.
Auckland	31·71	39·38	39·15
Wellington	32·36	40·35	39·96
Dunedin	34·07	41·13	41·71
Bluff	34·82	40·38	40·95

Electric Telegraph.

There were 7,249 miles of telegraph-line open at the end of March, 1901, carrying 20,682 miles of wire. 3,898,128 telegrams were transmitted during the year; of these, the private and Press messages numbered 3,534,444, which, together with telephone exchange and other telegraph receipts, yielded a revenue of £186,978 1s. 10½d.

There were twenty-two telephone exchanges and twenty-six sub-exchanges on the 31st March, 1901. The number of connections increased from 7,150 in March, 1900, to 8,210 in March, 1901. The subscriptions to these exchanges during the financial year amounted to £49,117 0s. 8d.

The capital expended on the equipment, &c., of the several telephone exchanges up to the 31st March, 1901, was £176,349 1s. 8d.

SECTION X.—METEOROLOGY.

TEMPERATURE, RAINFALL, ATMOSPHERIC PRESSURE, AND WIND, THROUGHOUT NEW ZEALAND, AS OBSERVED AT SEVEN STATIONS, FOR THE YEAR 1900.

(*From Tables prepared by Sir James Hector.*)

THE OBSERVATIONS WERE TAKEN AT 9.30 A.M.

Stations and Months.	Temperature in Shade.		Rainfall.		Mean Height of Barometer.	Prevailing Wind.
	Highest.	Lowest.	Wet Days.	Max Fall. 24 hrs.		
Auckland (lat. 36° 50′ S.; long. 174° 50′ 40″ E.; alt. 125 ft.).	° Fahr.	° Fahr.	No.	Inches.	Inches.	
January	77·0	50·0	5	0·630	30·010	SW.
February	78·0	55·5	9	0·540	30·060	SW.
March	78·5	54·5	10	0·480	30·140	SW, NE, SE.
April	76·5	47·0	16	0·580	30·100	NE, SE, NW.
May	68·0	41·0	22	1·830	30·040	NE, SW, SE.
June	64·0	44·0	16	1·130	30·100	SE, E, NE.
July	63·0	40·0	23	0·910	29·900	SW, SE.
August	65·0	44·0	24	0·790	29·960	NE, E, NW.
September	64·5	42·5	19	0·900	29·930	SW, NW.
October	67·5	46·0	22	1·190	29·890	SW, NW.
November	71·5	45·5	14	0·540	30·030	SW.
December	76·0	49·0	17	1·290	29·950	NE. SW, SE.
Rotorua (lat. 38° 9′ S.; long. 176° 15′ E.; alt. 990 ft.).						
January	80·0	35·0	3	0·930	29·820	SW.
February	81·0	35·0	7	0·630	29·930	NW, SW, SE.
March	85·0	36·0	5	0·710	30·320	N, NW.
April	78·0	31·0	11	1·420	30·260	N.
May	68·0	29·0	18	2·440	30·170	N.
June	64·0	26·0	7	0·950	30·230	SE.
July	66·0	25·0	13	1·350	29·910	SW.
August	65·0	29·5	17	2·200	30·030	SE, SW.
September	67·5	30·0	14	3·100	29·940	N.
October	73·5	31·0	18	1·350	30·060	SW, SE, W.
November	80·0	33·0	12	0·440	30·130	W, NW.
December	85·0	37·0	12	1·270	30·050	N, S, W.

Stations and Months.	Temperature in Shade.		Rainfall.		Mean Height of Barometer.	Prevailing Wind.
	Highest.	Lowest.	Wet Days.	Max Fall. 24 hrs.		
New Plymouth (lat. 39° 3′ 35″ S.; long. 174° 4′ 58″ E.; alt. 100 ft.	° Fahr.	° Fahr.	No.	Inches.	Inches.	
January	79·0	45·0	13	0·500	30·100	SW, W, SE.
February	82·0	40·0	10	1·400	30·130	NE, SW.
March	89·0	43·0	12	1·130	30·250	SE.
April	81·0	39·0	22	1·020	30·160	SE, E, N.
May	87·0	36·0	25	1·850	30·094	SE.
June	84·0	36·0	10	1·100	30·190	SE.
July	86·0	32·0	24	1·300	29·900	SE, SW.
August	73·0	37·0	24	1·250	30 040	SE.
September	82·0	36·0	20	1·080	29·970	SE, NE, N.
October	87·0	40·0	26	1·030	29·910	NW, SE, N.
November	88·0	38·0	20	0·900	30·060	W, NW.
December	86·0	44·0	16	0 750	30·030	NE, W.
Wellington (lat. 41° 16′ 25″ S.; long. 174° 47′ 25″ E.; alt. 140 ft.).						
January	76·0	45·0	12	0·660	29·944	NW, SE.
February	79·0	44·5	9	1·180	30·022	NW, SE.
March	75·0	46·0	8	2·330	30·146	NW.
April	70·0	42·0	19	1·660	30·069	NW, SE.
May	62·5	37·0	22	0·800	30·005	NW.
June	61·5	36·0	15	0·600	30·160	S, NW.
July	61·0	34·0	18	3·050	29·773	NW, S.
August	65·0	37·0	18	1·280	29·956	NW, SE.
September	68·0	37·0	22	1·530	29·876	NW, S.
October	66·5	39·0	20	1·150	29·730	NW.
November	70·0	40·0	14	0·500	29 870	NW.
December	78·0	45·0	14	1·250	29·915	NW, SE.
Hokitika (lat. 42° 41′ 30″ S.; long. 170° 49′ E.; alt. 12 ft.).						
January	72·0	44·5	11	2·830	29·956	SW.
February	73·5	39·0	9	1·600	30·021	SW, NW.
March	71·0	44·5	11	2·220	30·152	SW, NW.
April	74·5	37·0	18	4·050	30·029	SW, E.
May	66·0	34·5	15	1·750	29·990	E.
June	65·0	28·0	6	1·750	30·145	E.
July	59·5	28·5	17	1·270	29·777	E, SW, NW.
August	66·5	33·0	11	2·000	29·914	E, SW, NW.
September	66 0	31·0	13	2·100	29·875	SW, E.
October	68·0	37·0	17	2·750	29·742	SW.
November	67·0	39·5	14	1·500	29 917	SW, NW.
December	84·0	42·5	11	1·290	29·928	SW, W.

Stations and Months.	Temperature in Shade.		Rainfall.		Mean Height of Barometer.	Prevailing Wind.
	Highest.	Lowest.	Wet Days.	Max Fall. 24 hrs.		
Dunedin (lat. 45° 52′ 11″ S.; long. 170° 31′ 7″ E.; alt. 300 ft.).	° Fahr.	° Fahr.	No.	Inches.	Inches.	
January	84·0	38·0	14	1·080	30·831	SW.
February	81·0	39·0	16	1·260	29.902	W, SW.
March	85·0	41·0	12	1·030	29·992	SW.
April	78·0	32 0	15	1·310	30·007	NE, W.
May	63·0	32·0	14	2·760	29·941	SW, W.
June	55 0	31·0	3	0·082	30·083	SW, S.
July	58·0	32·0	18	1·330	29·666	SW.
August	60·0	33 0	18	0·660	29·884	NE.
October	68·0	37·0	14	1·240	29·577	NE, SW.
November	76·0	36·0	14	4·480	29·716	SW, W.
December	86·0	42·0	15	0·960	29·860	NE, SW.
(Readings for eleven months only.)						
Chatham Islands (lat. 43° 52′ S.; long. 176° 42′ W.; alt. 100 ft.).						
January	65·0	43·0	18	0·360	29·750	SW.
February	68·0	42·0	13	0·540	29·860	SW, S.
March	69·0	42·0	8	0·150	30 010	SW, NW.
April	65·0	37·0	14	0 900	30 030	SW, NW.
May	64·0	34·0	21	0·800	29·850	N, NE, NW.
June	58.0	33·0	17	0 200	30·060	SE, SW.
July	59 0	34·0	25	0·950	29 480	SW, W.
August	58·0	30·0	12	0·700	29 910	W, E.
September	58 0	33 0	16	0·550	29·480	SW, N.
October	68·0	41·0	22	0 350	29·660	NW, E.
November	67·0	36·0	14	0·450	29 700	NW, SW.
December	67·0	45·0	12	1·050	29 860	SE, E.

SEVEN STATIONS: COMPARATIVE TABLE; YEAR 1900.

Stations.	Temperature in Shade.		Rainfall.		Mean Height of Barometer.	Prevailing Wind.
	Highest, and Date.	Lowest, and Date.	Days on which Rain fell.	Greatest Fall, and Date.		
	° Fahr.	° Fahr.	No.	Inches.	Inches.	
Auckland	78·5, 9 Mar.	40·0, 10 July	197	1·830, 8 May	30·069	SW.
Rotorua	85·0, 23 Mar., 24 Dec.	25·0, 10 July	137	3·100, 12 Sept.	30 070	N, SW, SE.
New Plymouth	89·0, 5 Mar.	32·0, 13 July	222	1·8·0, 8 May	30·069	SE.
Wellington	79·0, 1 Feb.	34·0, 13, 19, 20 July	191	3·050, 2 July	29·955	NW, SE, S.
Hokitika	84·0, 16, 18 Dec.	2·0, 15 June	153	4·050, 17 April	29·954	SW, NW, E.
Dunedin*	86·0, 19 Dec.	31·0, 19 June	153	4·480, 18 Nov.	29·950	SW, NE.
Chatham Islands	69·0, 17 Mar.	30 0, 14 Aug.	192	1·050, 29 Dec.	29·804	SW, NW.

* Eleven months only.

The following table, compiled from information published in the Statistical Abstract for the Colonial Possessions of the United Kingdom, shows the shade temperature for each month in New Zealand and other British Colonies. The figures given are the means of four years (H signifies highest, and L lowest):—

British Possessions (Stations and Height in Feet above Sea Level where known).	Jan.		Feb.		March.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		Year.	
	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.	H.	L.
New Zealand—	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.	°F.
Wellington (140)	78	45	78	47	76	44	70	43	66	38	62	34	59	33	62	34	65	37	69	41	74	33	75	44	78	33
Queensland—																										
Brisbane (130)	92	64	93	63	91	61	85	54	80	50	76	42	75	39	78	41	85	46	91	50	94	57	97	61	97	39
New South Wales—																										
Sydney (155)	92	59	89	58	84	59	79	51	72	48	67	44	63	39	70	42	77	45	88	48	87	54	94	57	94	39
Victoria—																										
Melbourne (91)	101	48	99	47	99	45	86	40	74	37	64	37	62	32	68	34	74	34	81	40	94	44	96	45	101	32
South Australia—																										
Adelaide (140)	108	49	106	50	100	48	89	45	78	40	67	38	65	36	74	3	79	41	86	41	96	45	101	48	108	36
Western Australia—																										
Perth (47)	107	50	102	53	98	52	96	57	81	40	70	38	70	37	73	38	80	42	83	42	93	48	100	51	107	37
Tasmania—																										
Hobart (160)	91	45	94	45	93	44	75	38	71	37	61	34	59	33	66	33	72	35	77	35	92	40	86	43	94	33
Natal—																										
Durban (150)	99	63	95	61	94	60	94	58	89	52	86	49	88	48	91	49	96	50	91	53	97	57	98	59	99	49
Cape Town—																										
Royal Observatory (37)	94	54	90	51	92	49	86	45	80	42	76	39	74	37	76	37	83	39	86	44		48	90	52	94	37
Hongkong—																										
Observatory (110)	73	47	78	46	77	49	84	58	89	68	91	73	91	74	91	74	92	70	90	66	82	55	79	49	91	46
Straits Settlements—																										
Singapore (30)	88	70	90	70	91	71	91	73	90	73	90	72	90	72	89	72	89	71	89	71	89	71	89	70	91	70
Mauritius—																										
Royal Alfred Observatory (179) ...	84	69	84	71	84	70	82	70	80	62	77	60	75	59	75	59	77	62	80	62	82	66	84	68	84	59
Canada—																										
Toronto (350)	47	-3	45	-3	51	6	71	22	78	31	86	44	88	46	89	47	82	41	71	27	56	13	45	-1	89	-3
Montreal (187)	45	-14	42	-13	44	0	69	24	81	32	87	43	88	50	86	50	81	39	70	27	59	11	43	-11	88	-13
St. John (N.B.) (116)	49	-7	46	-7	47	4	62	22	69	33	81	42	79	49	77	48	73	37	60	26	56	16	49	-3	81	-7
Halifax (122)	50	-1	46	-3	50	10	63	22	73	32	83	39	84	48	84	49	80	36	69	29	60	21	51	3	84	-3
Charlottetown, Prince Edward Island (38)	47	-6	43	-9	47	5	60	20	70	31	77	39	80	49	79	49	75	39	66	30	58	19	47	1	80	-9
Winnipeg, Manitoba (764) ...	34	-37	32	-37	49	-25	76	8	82	20	90	35	87	40	91	34	86	30	73	17	53	-16	39	-29	91	-37
Victoria, British Columbia (10) ...	51	14	55	22	60	30	67	29	73	36	76	39	79	43	76	44	71	38	64	35	55	30	51	23	79	14
St. John's, Newfoundland (125) ...	48	-6	50	-8	50	11	61	15	71	27	76	33	81	41	79	42	78	33	65	24	62	19	51	9	81	-8
Barbados—																										
Joes River (430)	81	67	81	67	83	69	84	70	84	71	85	72	84	70	85	70	85	71	85	71	84	70	83	69	85	67
Bahamas—																										
Military Hospital	77	63	79	68	79	67	84	69	89	72	88	73	89	78	89	73	87	75	86	77	82	70	77	67	89	63
Jamaica—																										
Kingston (60)	91	63	90	63	90	62	91	68	91	70	92	71	95	71	93	73	92	70	93	69	91	67	90	63	95	62
Trinidad (130)	86	67	87	68	88	69	88	70	89	70	86	71	86	71	86	70	89	70	88	70	87	70	85	69	89	67

SECTION XI.—OCCUPATION OF LAND; AND LIVE-STOCK.

THE occupation of land must not be confused with ownership,* because there are large parcels of lands held which are unused and unoccupied. Neither can lands occupied be properly compared with the returns of Crown lands alienated or in process of alienation, for certain lands have passed into the hands of Europeans which were never made waste lands of the Crown.

The occupied lands of the colony for 1900–1901 have been returned by the Department of Agriculture at 34,911,573 acres, including Crown lands leased for pastoral purposes only, or 488,920 acres in excess of the quantity for the preceding year.

Tables are given showing the numbers and acreages of holdings, grouped according to size, for the five years in which the Department of Agriculture has compiled the information.

In 1895 the holdings of over 1 acre in extent, as returned to the Registrar-General, numbered only 46,676. Holdings occupied by Maoris were excluded, besides holdings of exactly one acre, also gardens and orchards attached to residences.†

OCCUPIED LANDS: HOLDINGS.

[This and the succeeding statement deal with the full extent of occupied land, *including* Crown pastoral leases.]

Sizes of Holdings.	No. of Holdings.				
	1896-97.	1897-98.	1898-99.	1899-1900.	1900-1901.
1 acre to 10 acres, inclusive	16,715	17,133	17,230	17,454	17,468
10 acres to 50 "	11,008	11,182	11,426	11,505	11,399
50 " 100 "	6,833	7,068	7,276	7,195	7,162
100 " 200 "	8,804	9,192	9,164	9,177	9,080
200 " 320 "	5,296	5,481	5,584	5,675	5,751
320 " 640 "	5,244	5,436	5,555	5,830	6,023
640 " 1,000 "	1,829	1,956	1,946	2,128	2,212
1,000 " 5,000 "	2,367	2,454	2,589	2,667	2,802
5,000 " 10,000 "	343	345	369	352	392
10,000 " 20,000 "	227	246	220	233	233
20,000 " 50,000 "	162	164	175	169	167
50,000 acres and over	112	102	105	100	97
	58,940	60,759	61,639	62,485	62,786

* The only information in reference to ownership of land, which is available, gives figures up to the year 1892. It is contained in Parliamentary Return B.–20A of that year and states the total number of owners of land (town and country holdings of all sizes) to be 91,501 for the colony. But the Commissioner of Taxes pointed out in his remarks that the most important figures (showing ownership of *productive* land) are those of freeholders outside boroughs and town districts, and excluding holdings of under 5 acres. These figures are:—

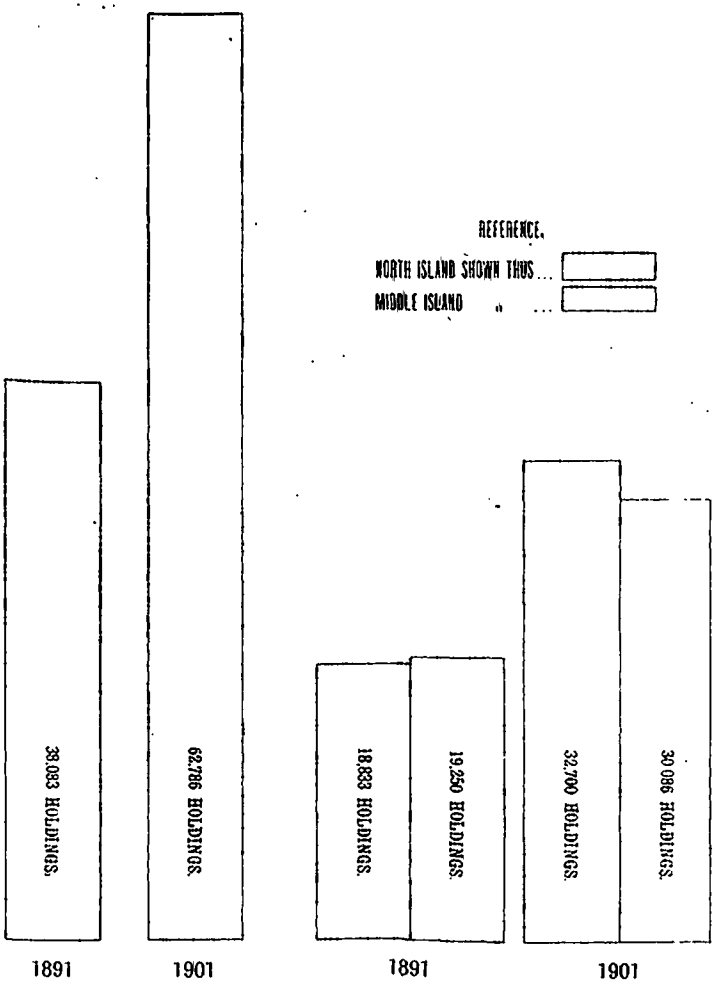
NEW ZEALAND OWNERS (OVER 5 ACRES).

Year 1892	38,935	Year 1886	34,450
" 1889	37,432	" 1883	30,764

† At the census of April, 1896, the actual number of persons described in the census schedules as having occupations necessitating their occupying holdings of land was 36,643. This number includes 31,577 farmers, 2,115 runholders, 1,402 market-gardeners, 619 horticulturists, 430 dairy-farmers, 225 fruit-growers, 175 nurserymen, 33 vignerons, 32 poultry-farmers, 19 bee-farmers, and 16 others.

DIAGRAM SHOWING THE INCREASE IN THE NUMBER OF OCCUPIED HOLDINGS OF ONE ACRE AND OVER IN EXTENT (EXCLUDING MAORI HOLDINGS) DURING TEN YEARS.

The Whole Colony
(excluding Chatham and Kermadec Islands).



The holdings are shown to have increased by the number of 3,846 since 1896–97.

The total acreage of occupied land is given in the following table:—

OCCUPIED LANDS: ACREAGES.

Sizes of Holdings in Acres.			1896-97. Acres.	1897-98. Acres.	1898-99. Acres.	1899-1900. Acres.	1900-1901. Acres.
1 to	10 inclusive	...	69,626	68,929	68,671	70,200	71,387
10 "	50 "	...	316,493	317,321	315,651	322,936	320,158
50 "	100 "	...	548,045	558,798	570,503	568,716	556,868
100 "	200 "	...	1,369,170	1,398,699	1,401,171	1,404,581	1,389,120
200 "	320 "	...	1,387,431	1,431,406	1,469,859	1,475,195	1,493,761
320 "	640 "	...	2,449,451	2,492,275	2,568,462	2,688,231	2,772,325
640 "	1,000 "	...	1,486,693	1,611,267	1,649,580	1,731,636	1,843,235
1,000 "	5,000 "	...	4,929,539	5,165,119	5,364,539	5,495,467	5,715,047
5,000 "	10,000 "	...	2,422,197	2,416,149	2,579,773	2,451,073	2,591,497
10,000 "	20,000 "	...	3,293,706	3,501,576	3,274,623	3,201,355	3,272,741
20,000 "	50,000 "	...	4,913,228	5,251,819	5,448,033	5,535,541	5,417,990
50,000 and over		...	10,126,643	9,769,121	9,675,403	9,477,632	9,467,444
			33,312,212	33,980,479	34,386,268	34,422,653	34,911,573

In regard to holdings, out of a total of 62,786 in 1901, the large proportion of 36,029, or 57·38 per cent., were from 1 to 100 acres in extent; 45,109 or 71·86 per cent., were from 1 to 200 acres; and 50,860, or 81·01 per cent., were from 1 to 320 acres in size. The total number over 320 acres was only 11,926, or 18·99 per cent. of the whole, thus indicating a considerable degree of moderately close settlement, although the area of the holdings over the 320 acres limit necessarily shows as very large in a table which includes the Crown pastoral leases.

The plan of excluding these leases from the table showing the holdings in classes has its advantages, though not now adopted.

From the total extent of occupied land shown for the colony, such of the area of the Crown pastoral leases *as has been distinguished by the enumerators* can be deducted, and comparison then made for the census years 1886 and 1891, and the Agricultural Department returns for 1900–1901. The figures are:—

—	Census Results, March, 1886.	Census Results, April, 1891.	Figures returned by Department of Agriculture, 1900–1901.
	Acres.	Acres.	Acres.
Total area of occupied land (after deducting Crown pastoral leases)	17,077,074	19,951,925	26,982,486

The acreage shown in the returns as held on Crown pastoral lease would appear to have been understated in the returns rendered by occupiers, for the table (which is given on the next page) shows less than eight millions of acres. The figures in the previous column headed "Held from Crown under various tenures" seem greater than they should be, judging from the Lands Department

returns. Possibly there may have been some misplacements, and caution is advised in using the numbers in the last two columns.

OCCUPATION OF LAND: TENURE.

Provincial Districts.	Total Area of Holdings.	Freehold.	Leased from Private Individuals or Public Bodies.	Leased from Natives.	Held from Crown under Different Tenures.	Held under Pastoral Lease
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Auckland ..	5,291,516	3,556,671	408,691	505,367	738,092	82,695
Taranaki ..	1,008,552	523,527	206,530	92,560	185,935	..
Hawke's Bay ..	3,201,739	1,763,829	313,349	873,896	186,635	64,030
Wellington ..	3,824,768	2,438,994	526,815	249,781	608,162	1,016
Marlborough ..	2,317,149	784,836	67,136	22,479	571,447	871,251
Nelson ..	2,014,571	1,002,305	66,349	21,555	309,712	614,650
Westland ..	547,866	57,474	19,621	5,129	258,428	207,214
Canterbury ..	6,449,162	2,746,531	974,282	10,218	726,060	1,992,071
Otago ..	10,256,250	2,866,038	1,188,106	12,895	2,093,051	4,096,160
Totals ..	34,911,573	15,740,205	3,770,879	1,793,880	5,677,522*	7,929,087*

* For remarks as to the accuracy of the figures in the columns see above.

It would appear that holders of their lands from the Crown do not return to collectors so much as the quantity on which they pay rent to Government. The acreages stated to be held under Crown pastoral lease do not agree with the tables of the Lands Department.

Arranged according to the number of holdings, the provincial districts stand in order as under:—

Auckland	14,879 holdings.
Otago	13,797 "
Canterbury	11,086 "
Wellington	10,297 "
Taranaki	4,335 "
Hawke's Bay	3,189 "
Nelson	3,087 "
Marlborough	1,431 "
Westland	685 "

The occupied holdings of the North Island now considerably outnumber those of the Middle Island, the numbers being: North Island, 32,700; Middle Island, 30,086. For the year 1896-97 the returns showed 29,535 holdings for the Middle Island, against 29,369 for the North, besides 36 holdings at the Chatham Islands, of which no account was taken for the last four years.

The full details of holdings and acreages, classified according to size, for the year 1900-1901 will be found in the table on the following page.

Occupation of Land : Number and Area of Holdings (including Crown Pastoral Leases).

(As compiled by the Department of Agriculture.)

Table showing for the Year 1900–1901 the Occupied Holdings and the Acreages (including Crown Pastoral Leases) in Groups of Sizes, according to Provincial Districts.

Provincial Districts.	Total of Holdings.	1–10 Acres, inclusive.	Over 10–50 Acres, inclusive.	Over 50–100 Acres, inclusive.	Over 100–200 Acres, inclusive.	Over 200–320 Acres, inclusive.	Over 320–640 Acres, inclusive.	Over 640–1,000 Acres, inclusive.	Over 1,000–5,000 Acres, inclusive.	Over 5,000–10,000 Acres, inclusive.	Over 10,000–20,000 Acres, inclusive.	Over 20,000–50,000 Acres, inclusive.	Over 50,000 Acres.
Auckland: Area in acres ...	5,291,516	16,311	81,781	148,995	325,410	355,814	600,731	424,210	1,159,999	546,195	354,428	769,059	508,563
Number of holdings ...	*14,879*	*4,138*	*2,725*	*1,924*	*2,169*	*1,387*	*1,319*	*507*	*561*	*90*	*33*	*20*	*6*
Taranaki: Area in acres ...	1,008,552	2,692	16,884	56,646	107,063	147,038	213,608	115,230	258,713	5,345	25,333	...	...
Number of holdings ...	*4,335*	*567*	*589*	*749*	*1,102*	*678*	*467*	*145*	*135*	*1*	*2*	...	...
Hawke's Bay: Area in acres ...	3,201,739	5,152	17,406	18,050	38,850	46,072	104,543	70,772	466,599	360,541	649,588	803,596	620,540
Number of holdings ...	*3,189*	*1,218*	*650*	*243*	*260*	*176*	*212*	*83*	*215*	*52*	*47*	*27*	*7*
Wellington: Area in acres ...	3,824,768	11,740	48,643	86,962	267,765	245,084	505,469	361,253	1,027,712	437,215	447,897	185,557	199,471
Number of holdings ...	*10,297*	*2,678*	*1,783*	*1,089*	*1,684*	*937*	*1,077*	*438*	*510*	*63*	*30*	*6*	*2*
Marlborough: Area in acres ...	2,317,149	1,646	4,754	8,111	27,294	25,995	78,307	71,410	233,403	113,967	136,589	404,592	1,211,081
Number of holdings ...	*1,431*	*473*	*175*	*104*	*178*	*88*	*160*	*92*	*106*	*24*	*9*	*15*	*7*
Nelson: Area in acres	2,014,571	3,081	18,645	34,659	66,947	72,805	128,093	110,906	223,744	33,630	126,438	364,378	831,245
Number of holdings ...	*3,087*	*764*	*643*	*415*	*461*	*271*	*279*	*108*	*126*	*5*	*7*	*11*	*7*
Westland: Area in acres ...	547,866	539	4,152	6,760	15,110	13,110	22,230	9,407	45,749	117,325	148,910	169,574	...
Number of holdings ...	*686*	*186*	*146*	*92*	*101*	*49*	*50*	*12*	*17*	*17*	*9*	*7*	...
Canterbury: Area in acres ...	6,449,162	14,470	63,523	90,609	190,528	218,335	413,364	261,989	1,054,436	413,229	475,851	1,109,117	3,143,711
Number of holdings ...	*11,086*	*3,549*	*2,296*	*1,180*	*1,289*	*854*	*916*	*315*	*534*	*59*	*34*	*36*	*25*
Otago: Area in acres	10,256,250	15,726	64,370	106,076	290,133	369,508	705,960	418,058	1,244,692	564,050	912,707	1,612,117	3,952,833
Number of holdings ...	*13,797*	*3,896*	*2,392*	*1,366*	*1,846*	*1,412*	*1,543*	*512*	*598*	*81*	*62*	*46*	*43*
Totals { Area in acres ...	34,911,573	71,387	320,158	556,868	1,389,120	1,493,761	2,772,325	1,843,235	5,715,047	2,591,407	3,272,741	5,417,990	9,467,444
Totals { *Number of holdings*	*62,786*	*17,468*	*11,399*	*7,162*	*9,080*	*6,761*	*6,025*	*2,212*	*2,802*	*392*	*233*	*167*	*97*

Live-stock.

A comparative table is presented showing the increase in live-stock since the year 1858. The figures are taken from the census as far as 1891, but for 1895–96 and following years the results of the enumeration made annually by the Department of Agriculture under "The Agricultural and Pastoral Statistics Act, 1895," have been made use of.

Year.	Horses.	Asses and Mules.	Cattle.	Sheep.	Goats.	Pigs.	Poultry.
1858 ..	14,912	122	137,204	1,523,324	11,797	40,734	*
1861 ..	28,275	153	193,285	2,761,383	12,191	43,270	236,098
1864 ..	49,409	339	249,760	4,937,273	12,005	61,276	378,414
1867 ..	65,715	323	312,835	8,418,579	11,964	115,104	676,065
1871 ..	81,028	397	436,592	9,700,629	12,434	151,460	872,174
1874 ..	99,859	267	494,917	11,704,853	14,276	123,921	1,058,198
1878 ..	137,768	241	578,430	13,069,338	14,243	207,337	1,323,542
1881 ..	161,736	362	698,637	12,985,085	11,223	200,083	1,566,114
1886 ..	187,382	297	853,358	16,564,595	10,220	277,901	1,679,021
1891 ..	211,040	348	831,831	18,128,186	9,055	308,812	1,790,070
1895–96	237,418	426	1,047,901	19,826,604†	*	239,778	*
1896–97	249,813	434	1,138,067	19,138,493†	*	209,834	*
1897–98	252,834	393	1,209,165	19,687,954†	*	186,027	*
1898–99	258,115	534	1,203,024	19,673,725†	*	193,512	*
1899–1900	261,931	459	1,222,139	19,348,506†	*	249,751	*
1900–1901	266,245	480	1,256,680	19,355,195†	*	250,975	*

* Not enumerated. † Numbers for April, 1895, 1896, 1897, 1898, 1899, and 1900.

The stock owned by Maoris in the year 1901, which is included above, comprised 317,436 sheep, and 36,943 head of cattle. The number of horses is not specified, but is known to be large.

Table showing for each County in New Zealand the Number of Horses, Cattle, Sheep, and Pigs in 1900.

County.	Horses, November, 1900.	Cattle, including Calves, November, 1900.	Dairy Cows, included in foregoing.	Sheep, including Lambs, April, 1900.	Pigs, November, 1900.
Mangonui ..	1,895	7,372	750	28,361	2,347
Whangaroa ..	488	1,687	98	7,329	661
Hokianga ..	2,509	6,996	1,372	13,835	3,313
Bay of Islands ..	2,519	9,465	1,540	38,087	2,128
Hobson	2,428	15,667	2,815	17,416	3,576
Whangarei ..	3,608	23,896	6,590	41,549	1,797
Otamatea ..	1,487	12,035	1,914	54,770	1,044
Rodney	2,014	11,549	2,766	80,725	935
Waitemata ..	2,397	10,833	3,627	38,624	1,575
Eden	5,536	6,412	4,167	1,663	3,160
Manukau ..	7,724	45,129	16,716	90,000	7,800
Coromandel ..	658	3,240	728	12,156	427
Thames ..	1,639	4,030	1,787	7,683	1,739
Ohinemuri ..	1,696	4,210	1,586	3,668	1,557
Piako	2,444	30,194	3,911	156,914	2,128

TABLE SHOWING THE NUMBER OF HORSES, CATTLE, SHEEP, ETC.—*continued.*

County.	Horses, November, 1900.	Cattle, including Calves, November, 1900.	Dairy Cows, included in foregoing.	Sheep, including Lambs, April, 1900.	Pigs, November, 1900.
Waikato ..	3,045	19,990	4,839	68,443	3,911
Waipa	3,196	20,962	6,757	39,750	4,098
Raglan	2,771	22,578	2,977	81,454	4,093
Kawhia	3,090	11,338	1,113		7,425
East Taupo ..	1,666	5,447	473	71,054	2,690
West Taupo ..					
Rotorua.. ..	895	1,144	189		990
Tauranga ..	2,549	14,596	3,034	5,655	2,346
Whakatane ..	1,767	4,293	911	25,429	1,400
Opotiki	1,251	4,526	1,256	18,689	1,241
Waiapu ..	2,813	5,659	393	315,049	2,692
Cook	6,364	34,622	3,128	861,143	2,772
Wairoa	3,065	8,217	650	547,409	963
Hawke's Bay ..	7,957	32,556	4,498	1,300,578	5,981
Waipawa ..	4,834	37,348	7,887	723,898	3,763
Patangata ..	2,621	27,604	627	755,479	928
Clifton	1,150	15,106	4,198	23,758	1,745
Taranaki ..	5,636	67,295	30,642	26,341	8,266
Stratford ..	2,347	34,444	14,397	86,430	3,688
Hawera ..	5,613	69,719	27,786	146,800	8,573
Patea	3,066	24,895	5,990	225,619	2,172
Waitotara ..	2,087	11,366	2,532	172,259	1,684
Wanganui ..	4,525	15,985	3,476	395,528	3,220
Rangitikei ..	5,179	27,971	5,429	540,659	3,657
Oroua	5,180	29,881	12,918	317,947	7,577
Kiwitea	2,057	16,363	5,227	277,089	3,147
Pohangina ..	945	6,914	2,235	115,847	1,802
Manawatu ..	2,332	19,222	5,291	200,828	3,322
Horowhenua ..	2,470	17,639	5,368	158,653	3,353
Pahiatua ..	1,889	19,380	7,285	193,925	3,316
Wairarapa North ..	3,662	25,875	2,725	659,476	2,001
Wairarapa South ..	4,862	40,971	8,635	590,936	5,117
Hutt	4,746	13,878	8,207	203,889	3,747
Mauriceville ..	332	3,122	1,319	57,072	420
Eketahuna ..	995	7,600	3,513	65,978	1,931
Akitio	1,103	8,404	678	132,329	361
Marlborough ..	3,553	6,020	2,139	492,735	2,337
Sounds	710	4,450	1,293	141,716	1,699
Kaikoura ..	1,094	2,066	757	154,767	491
Collingwood ..	1,113	6,511	2,150	45,532	2,370
Waimea ..	4,580	12,303	5,081	205,223	5,646
Buller	475	3,849	1,540	1,848	665
Amuri	1,228	3,012	347	387,331	115
Cheviot	908	1,589	653	178,616	740
Inangahua ..	870	6,196	1,470	22,963	1,249
Westland ..	1,320	10,497	2,576	18,011	959
Grey	807	5,294	1,781	10,522	1,064
Ashley	7,836	14,763	6,247	744,405	9,471
Selwyn	14,870	24,102	14,066	647,419	21,037
Akaroa	2,565	21,081	5,335	225,748	2,858
Ashburton ..	8,854	8,566	3,691	738,816	6,563
Geraldine ..	4,107	6,119	2,360	657,034	3,281
Levels	3,296	4,951	2,131		1,731

TABLE SHOWING THE NUMBER OF HORSES, CATTLE, SHEEP, ETC.—*continued.*

County.	Horses, November, 1900.	Cattle, including Calves, November, 1900.	Dairy Cows, included in foregoing.	Sheep, including Lambs, April, 1900.	Pigs, November 1900.
Waimate ..	4,860	6,746	2,146	550,763	2,638
Mackenzie ..	1,409	2,337	592	386,823	424
Waitaki	5,967	16,444	6,827	526,948	4,149
Waihemo ..	1,302	3,787	1,602	119,323	607
Waikouaiti ..	1,480	9,346	5,313	78,128	2,417
Peninsula ..	820	7,250	4,563	3,288	1,397
Taieri	7,067	24,124	9,888	210,791	6,184
Bruce	3,439	9,063	3,412	150,440	1,997
Clutha	4,570	17,921	5,497	289,373	2,978
Tuapeka ..	3,710	6,364	2,345	374,756	1,486
Maniototo ..	2,218	5,761	1,374	307,869	737
Vincent	2,193	4,823	1,348	294,153	1,101
Lake	1,384	3,418	952	159,603	547
Southland ..	15,831	59,480	20,683	792,319	11,461
Wallace and Fiord	4,693	18,036	5,229	438,821	1,979
Stewart Island ..	14	286	78	938	18
Totals ..	266,245	1,256,680	372,416*	19,355,195	250,975

* Not including 34,190 heifers over two years old intended for dairying.

Live-stock in Australasian Colonies.

The following gives the number of the principal kinds of live-stock in the several Australasian Colonies for the year 1899–1900 :—

Colonies.	Sheep.	Cattle.	Horses.	Pigs.
Queensland	15,226,479	5,053,836	479,127	139,118
New South Wales	36,213,514	1,967,081	482,200	239,773
Victoria	13,180,943*	1,833,900*	431,547*	337,588*
South Australia	5,721,493	526,524	180,335	84,262
Western Australia	2,282,306	297,081	65,918	55,953
Tasmania	1,672,068	160,204	31,189	74,451
	April, 1899.	Nov., 1899.	Nov., 1899.	Nov., 1899.
New Zealand	19,348,506	1,222,139	261,931	249,751

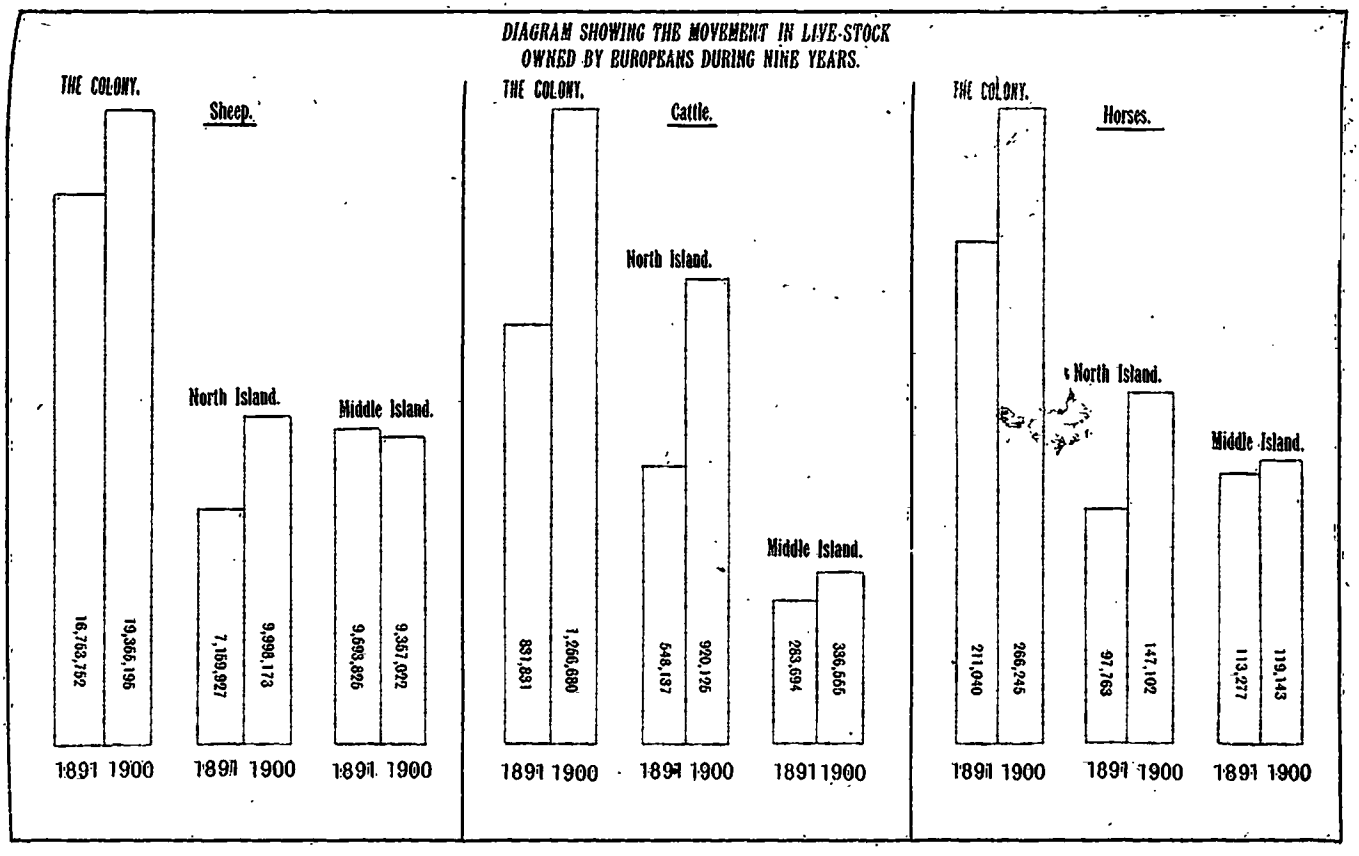
* As in 1894.

New Zealand thus takes second place in order for number of sheep, and fourth for the number of her cattle and horses.

Sheep.

The returns made to the Department of Agriculture show a smaller number of sheep for the years 1886 and 1891 than the census figures given previously, because the account was taken later in the year. The particulars are given for fifteen years, distinguishing the number for the North from that in the Middle Island.

DIAGRAM SHOWING THE MOVEMENT IN LIVE-STOCK OWNED BY EUROPEANS DURING NINE YEARS.



According to these returns, the flocks of the North Island increased from 5,285,907 sheep in the year 1886 to 9,998,173 in 1900, or at the rate of over 89 per cent., while sheep in the Middle Island decreased from 9,888,356 to 9,357,022, a loss of 5 per cent. in the same period. For the North Island the increase during the fifteen years was 4,712,266 sheep, while in the Middle Island there was an actual loss of 531,334.

Year.	North Island.	Middle Island.	Total.
1886	5,285,907	9,888,356	15,174,263
1887	5,506,485	9,649,141	15,155,626
1888	5,668,996	9,373,202	15,042,198
1889	5,990,244	9,433,084	15,423,328
1890	6,588,346	9,527,767	16,116,113
1891	7,159,927	9,593,825	16,753,752
1892	8,204,029	10,366,723	18,570,752
1893	8,685,361	10,695,008	19,380,369
1894	9,169,352	11,061,477	20,230,829
1895	8,994,646	10,831,958	19,826,604
1896	9,131,736	10,006,757	19,138,493
1897	9,540,717	10,147,237	19,687,954
1898	9,864,945	9,808,780	19,673,725
1899	9,953,399	9,395,107	19,348,506
1900	9,998,173	9,357,022	19,355,195

There was an increase of 6,689 in the total number of sheep since April, 1899, by the above figures, and an increase between 1891 and 1900 amounting to 2,601,443, or at a rate of 15·59 per cent. The export and local consumption of wool developed from 111,537,546 lb. for the year ended September, 1891, to 148,052,907 lb. for the corresponding year of 1900. The export of sheepskins and pelts, which in 1890 was 2,292,521 in number, rose to 4,669,430 in 1900.

Over a series of years the number of sheep has been well maintained, although the slaughter needed for the export of frozen mutton increased to upwards of three millions of sheep and lambs in 1900.

The proportion of small flocks of sheep, until 1900, increased very considerably, and with smaller flocks the rabbit difficulty is easier to master than with large ones.

NUMBER OF FLOCKS, 1886, 1891, 1896, 1899, AND 1900.

Size of Flocks.	1886.	1891.	1896.	1899.	1900.
Under 500	6,024	8,272	12,028	12,719	12,939
500 and under 1,000 ..	1,189	1,691	2,605	2,656	2,810
1,000 „ 2,000* ..	747	969	1,460	2,519*	2,621*
2,000 „ 5,000 ..	532	666	892		
5,000 „ 10,000 ..	263	287	340	363	352
10,000 „ 20,000 ..	228	239	231	204	196
20,000 and upwards ..	166	169	147	138	139
	9,149	12,293	17,703	18,599	18,357

*	1899.	1900.
From 1,000 to 2,500	1,880	1,971
„ 2,500 to 5,000	639	650
	2,519	2,621

The average size of the flocks is found to have been 1,659 sheep for 1886, 1,363 for 1891, 1,081 in 1896, 1,040 in 1899, and 1,054 in 1900.

Of the provincial districts, that of Wellington had most sheep in 1900, Canterbury came next, and Otago occupied the third place. The full particulars, with increases or decreases since 1899, are:—

Provincial Districts.	No. of Sheep in 1899.	No. of Sheep in 1900.	Increase.	Decrease.
Wellington ..	4,070,737	4,082,415	11,678	..
Canterbury ..	4,040,456	3,951,008	..	89,448
Otago ..	3,715,485	3,746,750	31,265	..
Hawke's Bay ..	3,291,876	3,327,364	35,488	..
Auckland ..	2,082,121	2,079,446	..	2,675
Nelson ..	860,276	841,513	..	18,763
Marlborough ..	751,321	789,218	37,897	..
Taranaki ..	508,665	508,948	283	..
Westland ..	27,569	28,533	964	..
	19,348,506	19,355,195	6,689	Net increase.

Six of the provincial districts show an increase in the number of sheep in 1900 when compared with the previous year's returns, aggregating 117,575, to which gain Marlborough contributed 37,897, Otago 31,265, Hawke's Bay 35,488, Wellington 11,678, Westland 964, and Taranaki 283. The other three provincial districts show decreases (Canterbury 89,448, Nelson 18,763, and Auckland 2,675), and thus reduce the gain for the whole colony to 6,689, as shown above.

It has been estimated that the annual consumption of mutton in New Zealand is equivalent to 2·25 sheep per inhabitant, and that the number of sheep required in the present year (1901) for food will be about 1,834,000. (Maoris, for the purposes of this calculation, have been included.)

Two important advantages that sheep-farming has in New Zealand are mentioned by Mr. J. A. Johnstone in the Year-book for 1894. They are: (1) the low cost of the production of mutton, (2) the high percentage of natural increase. Respecting the first point, it has been proved beyond all doubt that, under ordinary conditions, the very choicest of mutton can be so produced as to pay the grower handsomely when sold at 2d. per pound for the carcase at the nearest shipping-port. To the British sheep-farmer this statement, of course, is valueless by itself; but, when told that this mutton would cost the London butcher, delivered *ex* steamer at the dock, only 3½d. per pound, he will be able to realise in some measure what a wonderful grazing-country New Zealand is, and to understand how it is that settlers of the right stamp have done so well. Then, with regard to the high percentage of increase, there need only be cited a few average returns from well-known flocks to show what excellent lambings New Zealand farmers obtain under good management.

LAMBING RETURNS.—AVERAGES.

Locality.	Breed of Flock.	Breed of Rams.	Breed of Ewes.	No. of Ewes.	Percentage of Lambs.	Remarks.
North Island ..	Lincoln	Lincoln	Lincoln	7,517	81·04	Land merely surface-sown in English-grass pasture.
" ..	"	"	"	5,301	85·05	
" ..	"	"	¾ Lincoln	12,177	100·00	
" ..	Romney	Romney	Romney	1,141	96·17	
" ..	Lincoln	Southd'n	Lincoln	2,033	94·71	
Middle Island	Merino	Merino	Merino	14,765	75·36	Mountainous country in n'tive past're, unimproved.
" ..	"	B. Leic'str	"	4,235	88·94	
" ..	Cross-bred	"	Cross-bred	8,624	80·82	In English-grass pasture.
" ..	Half-bred	"	Half-bred	2,747	82·79	
" ..	B. Leic'str	"	B. Leic'str	778	90·77	
" ..	Lincoln	Lincoln	Lincoln	452	88·08	
" ..	R. Marsh	R. Marsh	R. Marsh	253	111·46	
" ..	E. Leic'str	E. Leic'str	E. Leic'str	464	93·34	
" ..	Shropshire	Shropshire	Shropshire	168	97·41	
" ..	Southd'n	Southd'n	Southd'n	114	96·87	

The above returns are fair average ones, but much higher might have been shown if exceptional cases had been selected.

As showing the actual cost of managing two large estates in New Zealand (Middle Island), No. 1 carrying 20,000 cross-bred sheep, and No. 2 carrying 40,000, the subjoined table may prove interesting:—

	No. 1. Per Head.	No. 2. Per Head.
	s. d.	s. d.
Cost of shearing, including scouring and putting wool f.o.b.	0 6·5	0 6·3
Management, shepherding, dipping, &c.	0 10	0 9·6
Cost of providing special feed (turnips, green feed, chaff, &c.)	1 1	1 6·3
Cost of renewing English grass ..	2 0	1 5
Total per head	4 5·5	4 3·2

Cattle.

The increase of cattle between 1891 and 1896 was 216,070, or at the rate of 25·98 per cent. The rapid development of the butter and cheese industry, represented in great part by the export figures given in the comparative table on page 136, created a requirement for milch cows, which increased in number from 206,906 in 1891 to 276,217 in 1896, or at the rate of 33·50 per cent.

The cattle as enumerated in 1900–1901 for each provincial district are given in the next table. Here is shown the substantial increase of 34,541 head of all classes over the number returned in 1899–1900, and of no less than 22,163 in the number of cows and heifers for dairy purposes.

Provincial District.	Bulls for Stud Purposes.	Steers over Two Years Old.	Cows and Heifers for Dairy Purposes.	Cows and Heifers for Breeding Purposes.	Cows and Heifers for Fattening.	Steers and Heifers under Two Years not otherwise enumerated.	Totals.
Auckland	5,611	63,582	84,566	45,980	17,228	121,403	338,370
Taranaki	3,311	25,411	91,127	8,495	7,135	75,980	211,459
Hawke's Bay ..	1,388	23,578	14,778	32,060	3,778	30,143	105,725
Wellington ..	4,570	42,106	81,024	43,649	8,181	85,041	264,571
Marlborough ..	229	1,515	4,496	721	754	4,821	12,536
Nelson	604	4,901	12,549	1,569	2,373	11,464	33,460
Westland	239	3,737	5,047	1,497	847	4,424	15,791
Canterbury ..	1,288	9,345	38,406	1,899	5,396	32,331	88,665
Otago	2,956	24,709	74,613	14,760	6,711	62,354	186,103
Totals, 1900-1901..	20,196	198,884	406,606*	150,630	52,403	427,961	1,256,680
„ 1899-1900..	19,754	222,559	383,443*	133,847	53,041	397,795	1,222,139
Increase, 1900-1901	442	..	22,163	16,783	..	30,166	34,541
Decrease, 1900-1901	..	23,675	..	..	638	..	..

*Including heifers over two years old intended for dairying: 34,190 in 1900-1901, and 39,887 in 1899-1900. For actual number of dairy cows in each county see table on pages 266-268.

Classified according to breed, the numbers for the two years under review are:—

	1899-1900.	1900-1901.
Pure-bred—		
Shorthorn	50,417	65,117
Hereford	4,301	5,618
Polled Angus	8,205	8,885
Ayrshire	5,395	4,609
Jersey	3,540	3,341
Other pure-breds	2,623	4,130
Crosses	1,147,658	1,164,980
Totals	1,222,139	1,256,680

Out of a total of 1,256,680 cattle in the colony, the North Island is shown to have had 920,125, or 73 per cent., while the Middle Island had 336,555, or 27 per cent. Similarly, the dairy cows and heifers intended for dairying in the North Island numbered 271,495, and in the Middle Island 135,111.

Thus, the North Island, which now leads as regards number of sheep, contains more than twice as many dairy cows and other cattle as the Middle Island.

Of the total number of cattle (1,256,680) given above, 372,416 were dairy cows. It is found impossible to give a statement of the actual amount of butter and cheese made, even at the factories only. All that can be said is that there were in October, 1900, 249 cheese and butter factories and creameries, with 202 skim-

ming-stations, reported to the Department of Agriculture. But very few of these factories made any return to the department of their output for the previous year, and it is therefore impossible to arrive at the total quantity of cheese and butter made. The census returns for 1896 show there were in that year only 170 factories and 105 creameries, the annual output at that time amounting to 11,336,776 lb. of butter and 4,323 tons of cheese.

Horses.

The increase in horses is shown for three census years:—

Census Years.	Number of Horses.	Numerical Increase.	Increase per Cent.
1886	187,382	23,658	12·63
1891	211,040		
1896	237,418	26,378	12·50

At the enumeration made in 1900–1901 (November to January) the number of horses was found to have increased to 266,725 (including 480 mules and asses), for which particulars are given. It will be seen that the Provincial District of Auckland had by far the most horses, Otago and Canterbury following, Wellington taking fourth place.

Provincial District.	Entires.	Geldings.	Mares over Two Years old.	Mares with Foal at Foot, or to foal this Season.	Colts and Fillies under Two Years old.	Totals.
Auckland ..	770	31,218	21,844	6,490	8,357	68,679
Taranaki ..	149	7,776	6,511	1,587	1,792	17,815
Hawke's Bay ..	177	8,773	6,344	1,545	1,673	18,512
Wellington ..	463	19,551	15,087	3,612	3,690	42,403
Marlborough ..	49	2,389	1,898	392	631	5,359
Nelson	107	4,048	3,465	710	845	9,175
Westland ..	26	1,059	679	178	203	2,145
Canterbury ..	364	22,183	17,588	3,176	4,567	47,878
Otago	360	23,935	20,071	4,327	6,066	54,759
Totals, 1900–1901	2,465	120,932	93,487	22,017	27,824	266,725*
" 1899–1900	2,245	122,845	92,110	18,778	26,412	262,390*
Increase ..	220	..	1,377	3,239	1,412	4,335
Decrease ..	..	1,913	..	..	..	..

* Including 480 mules and asses in 1900-1901, and 459 in 1899-1900.

Classified according to breed, the numbers for the two years under review are:—

	1900–1901.	1899–1900.
Thoroughbred	6,118	5,660
Hunter and hackney	26,917	27,540
Carriage and trotting	18,999	16,871
Light ordinary	106,067	107,240
Draught	97,469	93,300
Ponies under 14 hands	10,675	11,320
Mules and asses	480	459
Totals	266,725	262,390

It has long been expected that the export of New Zealand horses to Australia and India would assume large proportions. So far, however, the trade has not developed to the extent anticipated. The opinion has been often expressed that more might be done than has been in the past. The following figures will show the position for the years 1885, 1890, and 1895 to 1900 :—

Exported to	1885.	1890.	1895.	1896.	1897.	1898.	1899.	1900.
Victoria	133	92	10	22	34	41	12	29
New South Wales	2,687	197	53	53	26	39	70	19
Queensland	..	..	..	..	..	..	..	2
Tasmania	113	27	1	1	23	1	16	9
Fiji	32	57	12	2	2	3	4	16
Bengal	34	235	94	151	55	116	105	69
Brazil	..	2	..	..	..	..	..	..
South Sea Islands	13	18	15	14	11	9	6	8
United Kingdom	..	..	5	6	1	1	2	3
United States of America (W. Coast)	10	..	3	..	..	..	1	1
Cape Colony	..	..	..	..	..	..	..	600
Natal	..	..	..	..	..	..	2	..
Singapore	..	..	..	..	..	..	1	..
	3,022	628	193	249	152	210	219	756

The military requirements for the Cape Colony caused an increase for the last year mentioned.

Pigs.

Pigs have decreased since 1891, when the number was 308,812, against 250,975 in 1900–1901. The figures given in the accompanying table are those compiled by the Agricultural Department, and for 1900–1901 show an increase of 1,224 in the total number of pigs kept in the previous year. The Auckland Provincial District has far more pigs than any other.

NUMBER OF PIGS IN EACH PROVINCIAL DISTRICT.

Provincial District.	Boars for Stud Purposes.	Barrows and Sows over One Year old, for Fattening.	Sows kept solely for Breeding Purposes.	Barrows and Sows under One Year old.	Totals.
Auckland ..	1,684	11,308	9,937	44,916	67,845
Taranaki ..	504	2,494	3,284	18,162	24,444
Hawke's Bay ..	237	1,325	1,765	8,308	11,635
Wellington ..	1,174	3,786	6,862	32,833	44,655
Marlborough ..	118	614	606	3,189	4,527
Nelson	243	1,585	1,224	7,733	10,785
Westland ..	51	448	243	1,281	2,023
Canterbury ..	839	2,341	6,306	38,517	48,003
Otago	758	3,522	4,649	28,129	37,058
Totals, 1900–1901	5,608	27,423	34,876	183,068	250,975
1899–1900	6,141	28,293	36,791	178,526	249,751
Increase ..	..	..	..	4,542	1,224
Decrease ..	533	870	1,915	..	..

The approximate numbers of the different breeds were:—

	1900-1901.	1899-1900.
Pure Berkshire	37,882	36,942
Pure Yorkshire	5,635	4,643
Other pure-breds	1,272	850
Crosses	206,186	207,316
Totals	250,975	249,751

Ostrich-farming.

Ostrich farming has been attempted in New Zealand, both in Canterbury and Auckland. (See Year-book, 1897, page 313, and also special article in Part III. of Year-book of 1899, entitled "The Heir of the Moa.")

SECTION XII.—VITAL STATISTICS.

Births.

The number of births registered in the colony during 1900 was 19,546 or 25·60 in every 1,000 persons living. The rate is higher than that for the preceding year, but with this exception there has been a steady decline since 1881. The number of births registered in a year reached its maximum in 1884, when it stood at 19,846, after which it fell to 17,876 in 1892, rising year by year to 18,955 in 1898, falling in 1899 to 18,835, but again rising to 19,546 in 1900.

The position still remains, that the increase in the number of marriages solemnised of late years has not as yet had any considerable effect in raising the number of births, and the birth-rates for the last two years are the lowest so far recorded in the statistics of the colony.

The figures for each year are worthy of notice, especially in connection with the subsequent particulars given as to marriages solemnised and the growth of population :—

Year.	Number of Births.	Rate per 1,000 of Population.	Year.	Number of Births.	Rate per 1,000 of Population.
1882	19,009	37·32	1892	17,876	27·83
1883	19,202	36·28	1893	18,187	27·50
1884	19,846	35·91	1894	18,528	27·28
1885	19,693	34·35	1895	18,546	26·78
1886	19,299	33·15	1896	18,612	26·33
1887	19,135	32·09	1897	18,737	25·96
1888	18,902	31·22	1898	18,955	25·74
1889	18,457	30·07	1899	18,835	25·12
1890	18,278	29·44	1900	19,546	25·60
1891	18,273	29·01			

While this process of a diminishing birth-rate has been going on the marriages have been increasing numerically, and the population of the colony also (facts which, taken together, lead to the conclusion that child-bearing is to a certain extent avoided) :—

Year.	Number of Marriages.	Mean Population (excluding Maoris).	Year.	Number of Marriages.	Mean Population (excluding Maoris).
1881	3,277	493,482	1891	3,805	629,783
1882	3,600	509,309	1892	4,002	642,245
1883	3,612	529,292	1893	4,115	661,349
1884	3,800	552,590	1894	4,178	679,196
1885	3,813	573,362	1895	4,110	692,417
1886	3,488	582,117	1896	4,843	706,846
1887	3,563	596,374	1897	4,928	721,609
1888	3,617	605,371	1898	5,091	736,260
1889	3,632	612,716	1899	5,461	749,984
1890	3,797	620,780	1900	5,860	763,594

In the year 1881 there were in New Zealand 5·72 births to every

marriage in the previous year, and in 1900 the proportion had fallen to 3·58 births to each marriage.

In the Australian Colonies a similar decrease is noticeable. In Victoria the number of children to a marriage for the year 1880 was 4·99, but fell to 4·05 in 1898. In New South Wales the figures are 5·0 and 4·11 for the same years respectively.

New Zealand had in 1880 the highest birth-rate of all the Australasian Colonies (40·78), but now the case is reversed.

The fall over ten years is calculated as under:—

BIRTH-RATES PER 1,000 OF POPULATION.

Colony.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.
Queensland	36·35	35·84	33·73	31·86	32·85	30·06	29·92	28·28	27·31	..
New South Wales ..	34·50	33·89	33·33	31·48	30·66	28·35	28·42	27·14	27·10	..
Victoria	33 57	32·54	31·23	29·16	28·56	27·33	26·59	25·72	26·71	..
South Australia ..	33·92	32·41	31·76	30·49	30·23	28·46	26·97	24·98	25·51	..
Western Australia ..	35·63	33·09	34·22	28·27	26·30	22 65	25·82	29·35	30·64	30·73
Tasmania	33·37	32·47	33·92	31·11	30·09	28·16	27·73	26·24	25·98	26·52
New Zealand	29·01	27·83	27·50	27·28	26·78	26·33	25·96	25·74	25·12	25·60

This table shows that although New Zealand has now the lowest birth-rate but one of the Australasian Colonies, the fall has been much less in this colony since 1891 than in the others.

With a falling birth-rate, the census taken in 1896 showed lower numbers of each sex living at the period under five years than at the next quinquennial period, which is unsatisfactory, indicating as it does that there are not now sufficient living at the earlier years to maintain the number of those of five years and under ten now found in the tables. The census thus demonstrates the general correctness of the birth-rates, and shows that the results of the statistics are fairly accurate.

A declining birth-rate is noticeable in many civilised countries, and attention has been drawn to the serious consequences that may result by statisticians and political economists. That the fertility of women in New Zealand is decreasing further facts will tend to show.

Taking the number of married women in New Zealand at what may be considered the child-bearing ages (*i.e.*, from fifteen to forty-five years, inclusive) as shown by each census since 1878, and for the same years the number of legitimate births (excluding plural) registered, the birth-rate per 1,000 married women of the above-stated ages is easily found, and is shown to be steadily declining. In 1878 the rate was 337 per 1,000, and in 1896 it had fallen to 252 or, in other words, in 1878 one married woman of the ages specified in every three gave birth to a child, while in 1896 the rate was 1 in 4 only. The figures for each census year are given below, and are followed by a table showing the declining birth-rate, and the increase in the marriage-rate, in the United Kingdom.

BIRTH-RATES (LEGITIMATE) PER 1,000 MARRIED WOMEN AT CHILD BEARING AGES FOR EACH CENSUS YEAR, 1878 TO 1896.

Year (Census).	Number of Married Women between 15 and 45 Years of Age.	Number of Legitimate Births (Confinements).	Birth-rate per 1,000 Married Women of from 15 to 45 Years of Age.
1878	50,995	17,196	337·2
1881	57,458	18,003	313·3
1886	62,704	18,532	295·5
1891	63,165	17,455	276·3
1896	69,807	17,596	252·1

BIRTH AND MARRIAGE RATES IN THE UNITED KINGDOM, 1886, 1891, 1896, AND 1898.

Year.	Mean Population.	Births.		Marriages.	
		Number.	Rate per 1,000 of Population.	Number.	Rate per 1,000 of Population.
1886 ..	36,313,582	1,145,683	31·55	241,180	6·64
1891 ..	37,796,390	1,148,259	30·38	275,970	7·30
1896 ..	39,464,582	1,152,122	29·19	296,089	7·50
1899 ..	40,555,489	1,163,111	28·68	317,090	7·82

The above figures are taken from the "Statistical Abstract for the United Kingdom, 1885 to 1899" (forty-seventh number), published in August, 1900.

The birth-rates for ten years in Great Britain and certain countries of the European Continent are given from tho report of the Registrar-General of England. The rates in England and Wales, and in Scotland, are higher than those in New Zealand, but the rate for Ireland is lower. For 1890 and following years France has the lowest rate of all quoted —

BIRTH-RATES IN EUROPEAN COUNTRIES, 1889 TO 1898.

Countries.	Number of Births per 1,000 of Mean Population.									
	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.
Hungary ..	40·3	42·3	40·3	42·5	41·3	41·5	40·3	40·1	37·5	39·0
Austria ..	36·7	38·1	36·2	37·9	36·7	38·6	38·0	37·5	36·2	37.1
Italy	35·9	37·3	36·3	36·6	35·7	35·1	35·0	35·0	33·8	34·2
German Empire	35·7	37·0	35·7	36·7	35·8	36·1	36·3	36·0	36·2	35·9
Netherlands ..	32·9	33·7	32·0	33·8	32·7	32·8	32·7	32·5	31·9	32·0
Scotland ..	30·4	31·2	30·8	31·0	30·1	30·4	30·9	30·6	30·8	30·5
Norway ..	30·3	30·9	29·6	30·7	29·7	30·5	30·4	30·0	30·3	30·9
England and Wales ..	30·2	31·4	30·5	30·8	29·6	30·4	29·7	29·7	29·4	29·3
Belgium ..	28·7	29·6	28·9	29·5	29·0	28·5	29·0	29·0	28·6	28·8
Sweden ..	28·0	28·3	27·0	27·4	27·1	27·5	27·2	26·7	26·2	27·1
Switzerland ..	26·4	27·8	27·4	27·7	27·1	27·1	27·9	28·1	28·4	28·9
Ireland ..	22·3	23·1	22·5	23·0	22·9	23·2	23·6	23·5	23·2	22·9
France ..	21·8	22·6	22·3	22·7	22·3	21·7	22·5	22·3	21·8	21·9

From the year 1895 marriages have shown an increase, the rate being then 5·94 per 1,000 of population. In 1900 the rate rose to 7·67, the highest record since 1878, when it was 7·97 per 1,000 of mean population. The number of marriages solemnised in 1900 was 5,860, an increase of 399 on the number for 1899.

MARRIAGE RATES IN AUSTRALASIAN COLONIES PER 1,000 OF POPULATION.

	1874.	1886.	1891.	1896.	1898.	1899.
Queensland	8·62	8·67	7·18	6·05	6·03	6·78
New South Wales ..	7·70	7·99	7·39	6·59	6·66	6·89
Victoria	6·33	7·84	7·69	6·48	6·53	7·01
South Australia ..	8·00	6·24	7·31	6·20	6·18	6·16
Western Australia ..	6·96	7·98	8·00	8·45	9·89	9·89
Tasmania	6·83	7·26	6·63	5·88	6·29	6·37
New Zealand	8·81	5·99	6·04	6·85	6·91	7·28

In April, 1891, New Zealand had 83,204 children living under the age of 5 years, and in 1896 the number was 83,659, an increase of only 455, although the population at all ages increased in the quinquennium by 12·24 per cent. Between 1886 and 1891 the children living under 5 years actually decreased in number by 3,624, the increase of population of all ages (8·33 per cent.) being less than between 1891 and 1896 (12·24 per cent.). The number of children under one year to the total population at all ages, according to the results of three censuses, was :—

	Children under One Year.	Total Population (all Ages).
Census, 1886	18,355	578,482
" 1891	16,443	626,658
" 1896	17,070	703,360

Thus, in 1886, with a population of 578,482 persons, there were 18,355 children under one year, against 17,070 children of that age in 1896, with a population of 703,360 persons.

The births registered in 1885 were 19,693, against 18,546 in 1895, and the birth-rate fell from 34·35 per 1,000 of the population in the former year to 26·78 in the latter.

Deducting 1,637, the number of deaths of children under one year registered in 1895, from 18,546, the number of births for that year, leaves 16,909, or within 161 of the living children under one year at the time of the last census.

TWIN BIRTHS.

There were 190 cases of twin births (380 children), and triplets were registered in two instances, in 1900. The number of children born was 19,546; the number of mothers was 19,352: thus on an average one mother in every 102 gave birth to twins, against 106 in 1899, and 97 in the year 1898, and 101 in 1897 and 1896. In 1895 the proportion was one in 93, and in 1894 one in 103.

ILLEGITIMACY.

The births of 906 children were illegitimate: thus 46 in every 1,000 children born were born out of wedlock, against 44 in 1899.

The following table gives the rates of illegitimacy in each of the Australasian Colonies. The rate in New Zealand is less than in any other of the Australasian Colonies except South Australia:—

PROPORTION OF ILLEGITIMATE BIRTHS IN EVERY 100 BIRTHS.

Year.	Queensland.	New South Wales.	Victoria.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1890	4·85	5·26	5·09	2·50	..	4·05	3·30
1891	4·65	5·36	5·36	2·93	..	3·72	3·49
1892	5·05	5·71	5·59	2·93	5·89	4·75	3·32
1893	4·97	6·16	5·46	2·84	4·17	4·41	3·70
1894	4·52	6·14	5·50	3·05	4·66	5·09	3·80
1895	4·93	6·51	5·33	3·13	4·47	4·97	4·50
1896	5·22	5·71	5·63	3·45	5·61	5·91	4·48
1897	6·02	6·58	5·42	3·53	5·27	5·74	4·41
1898	6·04	6·93	5·29	3·62	4·99	5·09	4·23
1899	5·97	7·15	5·49	3·95	4·91	6·08	4·40
1900	6·40	7·01	..	4·24	4·82	5·43	4·63

These figures show a rise in the proportion of illegitimate births to every 100 births for this colony, amounting to 1·33 for the period 1890–1900.

The fall in the actual number of all births in New Zealand must not be forgotten when considering the increase in the number of illegitimates. The total number of births registered fell from 19,299 in 1886 to 18,612 in 1896, while the illegitimate births rose from 602 to 834. The causes that led to the fall in the birth-rate certainly did not greatly affect the number of illegitimate children.

ILLEGITIMATE BIRTHS, 1886 AND 1896.

	Proportion Illegitimate in every 100 Births.		Total Number of all Births.		Number of Illegitimate Births.	
	1886.	1896.	1886.	1896.	1886.	1896.
The whole Colony ..	3·12	4·48	19,299	18,612	602	834
Auckland and suburbs	4·34	7·23	2,376	1,922	103	139
Wellington and suburbs	4·70	8·05	1,341	1,342	63	108
Christchurch and suburbs	4·70	7·71	1,872	1,519	88	117
Dunedin and suburbs	5·55	7·84	1,585	1,173	88	92

The number of spinsters in the colony between 15 and 45 increased during the ten years from 52,348 (census 1886) to 85,105 (census 1896), or at the rate of 62·6 per cent., while the illegitimate births increased from 602 to 834, or at the rate of 38·5 per cent. only.

It would therefore appear that the larger proportion of illegitimate births now obtaining cannot with any certainty be taken as indicative of increased looseness of living on the part of the people.

The following figures, taken from "The Wealth and Progress of New South Wales, 1898–99," showing the rate of illegitimacy per

100 births in the Australasian Colonies and in the United Kingdom, are based on statistics for a period of five years:—

Country.	Illegitimate Births per Cent.	Country.	Illegitimate Births per Cent.
New South Wales ..	6·59	Tasmania	5·36
Victoria	5·44	New Zealand	4·28
Queensland	5·34	England and Wales ..	4·23
South Australia ..	3·35	Ireland	2·66
Western Australia ..	5·05	Scotland	7·21

Of the total number of children born in Australasia during the five years ended 1898, 5·42 per cent. were illegitimate, as compared with 4·42 per cent. in the United Kingdom for the period 1893–97.

The figures in the next table, which give the percentages of illegitimate births in a number of foreign countries, also cover in most cases a period of five years, 1893–97.

Country	Illegitimate Births per Cent.	Country.	Illegitimate Births per Cent.
Germany	9·22	France	8·41
Prussia	7·81	Belgium	8·69
Bavaria	14·10	Netherlands	2·80
Saxony	12·69	Sweden	10·46
Austria	14·75	Norway	7·17
Hungary	8·64	Italy	6·59

For England and Wales the proportion of illegitimate births to the total births in 1898 was 4·2 per cent., having gradually diminished from 7 per cent. in 1845. The minimum rate was 2·9 per cent., in Essex, and the maximum 7·8 per cent., in Herefordshire. For London the percentage was 3·7 in 1897.

The average proportion of illegitimate births in Scotland in 1897 was 7·0 per cent., the rate varying from 3·5 per cent., in Dumbartonshire, to 14·1 in Wigtownshire; but in Ireland in that year the extremely low average of 2·6 per cent. obtained, the rate varying from 0·7 in Connaught to 3·6 in Ulster.

The Legitimation Act.

An important Act was passed in 1894, entitled the Legitimation Act, which makes provision for the legitimation of children born before marriage on the subsequent marriage of their parents. Under this Act any child born out of wedlock, whose parents afterwards marry, is deemed to be legitimised by such marriage on the birth being registered in the manner prescribed by the Act. For legitimation purposes Registrars must register a birth

when called upon to do so by any person claiming to be the father of an illegitimate child; but such person is required to make a solemn declaration that he is the father, and that at the time of the birth there existed no legal impediment to his marriage with the mother of the child. He has also to produce the evidence of his marriage. It will thus be seen that in cases dealt with under the Act registration becomes the test of legitimacy. In the December quarter of 1894, 11 children were legitimised; in 1895 the number was 68; in 1896, 56; in 1897, 48; in 1898, 59; in 1899, 41; and in 1900, 62; making altogether 345 legitimations since the passing of the law.

"The Infant Life Protection Act, 1896."

By this statute it has been rendered unlawful for a person to take charge, for payment, of an infant to maintain or nurse for more than three days without holding license as an infants' home keeper. The house of such a person must be registered as an infants' home.

The administration of this law is a matter entirely managed by the police, and the Commissioner reports the working to be satisfactory after a short experience. The licensed homes are periodically inspected by the police authorities, and the results have shown that licensees generally comply with the required conditions, the homes and infants being well looked after.

Births and Birth-rates in the Four Chief Cities.

The total number of births registered as occurring in the four chief centres and suburbs in 1900 was 4,875, as against 4,563 for the previous year.

The births in the four cities rose from 2,854 in 1899 to 3,098 in 1900, and in the suburban boroughs from 1,709 to 1,777. The birth-rates for 1900 were :—

	Birth-rates per 1,000 of Mean Population.	
Auckland City	29·31	
" and five suburban boroughs ..	..	27·83
Wellington City	25·76	
" and three suburban boroughs ..	..	25·33
Christchurch City	21·51	
" and four suburban boroughs ..	..	24·06
Dunedin City	22·07	
and eight suburban boroughs ..	..	22·16

Thus, by the inclusion of the suburbs the rate is raised at Christchurch and Dunedin, but lowered at Auckland and Wellington. It will be observed that Auckland has the highest rate, Wellington next highest, Christchurch and Dunedin following with intervals. The difference between the Auckland rate (27·83) and the Dunedin rate (22·16) is considerable. The birth-rate for the whole colony for 1900 was 25·60 per thousand. Auckland is thus well over the average, Wellington, Christchurch, and Dunedin below it.

Taking the births in the four central boroughs without their suburbs, and comparing the numbers for 1899 and 1900, an increase for the later year is observed at Auckland of 40, at Wellington of 91, at Christchurch of 77, and at Dunedin of 36. The figures for the last five years are :—

	1896.	1897.	1898.	1899.	1900.
Auckland (without suburbs) ..	892	906	916	988	1,028
Wellington " ..	1,005	1,067	1,065	1,036	1,127
Christchurch " ..	370	376	390	340	417
Dunedin " ..	498	498	507	490	526

The birth-rates for the four central boroughs in 1900 show in each case a rise when compared with 1899. In Auckland the rate rose from 25·77 to 29·31; in Wellington, from 24·24 to 25·76; in Christchurch, from 18·74 to 21·51; and in Dunedin, from 20·82 to 22·07. The rates for five years, 1896 to 1900, are as follows :—

	Births per 1,000 of Population.				
	1896.	1897.	1898.	1899.	1900.
Auckland (without suburbs) ..	28·39	28·29	26·96	25·77	29·31
Wellington " ..	26·84	27·71	25·75	24·24	25·76
Christchurch " ..	21·81	21·88	22·07	18·74	21·51
Dunedin " ..	21·83	21·54	21·61	20·82	22·07

NATURALISATION.

Aliens residing in the colony may, on taking the oath of allegiance to His Majesty, obtain letters of naturalisation entitling them to enjoy all the rights and privileges that a natural-born subject of the United Kingdom can enjoy or transmit within this colony. Two hundred and sixty-seven aliens (230 men and 37 women) were naturalised in 1900.

The number belonging to each nationality was as under :—

NUMBER OF ALIENS NATURALISED IN 1900.

Natives of—	M.	F.	Natives of—	M.	F.
German Empire	65	21	Netherlands	5	0
Norway and Sweden ..	46	4	Greece	3	0
Denmark	37	12	Switzerland	5	0
Russia, Poland, and Finland	11	0	Belgium	3	0
France and possessions ..	13	0	Portugal and possessions ..	8	0
Italy and Sicily	8	0	Turkey and Syria ..	2	0
Austria-Hungary ..	5	0	Chili	2	0
China	4	0	Spain	1	0
United States of America ..	12	0			

The number of natives of each country naturalised during the last nineteen years is next shown,—

Natives of—		Natives of—	
Germany	1,398	France	106
Sweden and Norway ..	1,003	Netherlands	46
Denmark	747	Greece	38
China	344	Portugal	39
Italy and Sicily	169	United States of America ..	49
Switzerland	154	Belgium	25
Russia	171	Other countries	79
Austria-Hungary	186	Total	4,554

By section 2 of "The Aliens Act Amendment Act, 1882," repealed and re-enacted by section 2 of "The Aliens Act Amendment Act, 1892," it is provided that when the father, or mother being a widow, has obtained naturalisation in the colony, every child who during infancy has become resident with them in New Zealand shall be deemed to be naturalised, and shall have the rights and privileges of a natural-born subject.

MARRIAGES.

The marriages for 1900 show an increase on the number for the previous year. The number was 5,860, or 399 more than in 1899. The marriage-rate rose from 7·28 per 1,000 persons living in 1899 to 7·67 in 1900, the rate for the latter year being the highest obtained since 1878, when it stood at 7·97 per 1,000 persons. The improvement shown during the last five years sets New Zealand in a good position relatively to the colonies in Australia.

The rates for a series of thirteen consecutive years were :—

MARRIAGES PER 1,000 OF THE POPULATION.

Year.	Queensland.	New South Wales.	Victoria.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1888 ..	8·63	7·37	8·03	6·70	7·18	6·58	5·97
1889 ..	8·37	6·76	8·14	6·47	6·99	6·50	5·94
1890 ..	8·49	7·14	8·21	7·06	5·80	6·64	6·12
1891 ..	7·18	7·39	7·69	7·31	8·00	6·63	6·04
1892 ..	6·67	6·77	6·64	6·51	7·29	6·51	6·23
1893 ..	5·91	6·40	5·99	6·26	6·34	5·51	6·22
1894 ..	5·70	6·20	5·98	6·09	6·24	5·43	6·15
1895 ..	6·23	6·35	6·00	5·88	6·83	5·32	5·94
1896 ..	6·05	6·59	6·48	6·20	8·45	5·88	6·85
1897 ..	6·05	6·72	6·36	5·46	10·73	6·23	6·83
1898 ..	6·03	6·66	6·53	6·18	9·89	6·29	6·91
1899 ..	6·78	6·89	7·01	6·16	9·89	6·37	7·28
1900 ..	..	..	..	..	..	7·23	7·67

But the improved rate for this colony is still lower than the rate for some European countries.

MARRIAGES IN EVERY 1,000 OF THE POPULATION.

German Empire	1898 ..	8·5
Belgium	1898 ..	8·3
Hungary	1898 ..	8·3
England and Wales	1898 ..	8·2
Switzerland	1898 ..	8·0
Austria	1898 ..	7·9
Spain	1894 ..	7·8
Denmark	1898 ..	7·6
Scotland	1898 ..	7·6
France	1898 ..	7·5
Netherlands	1898 ..	7·3
Italy	1898 ..	7·0
Norway	1898 ..	7·0
Sweden	1897 ..	6·1
Ireland	1898 ..	5·0

Of the marriages solemnised in 1900, 5,296 were between bachelors and spinsters, 184 between bachelors and widows, 287 between widowers and spinsters, and 93 between widowers and widows. Divorced men and women have been classified as bachelors or spinsters: 21 divorced men and 32 divorced women were married during the year.

Included amongst spinsters are nine married women, and amongst the bachelors two married men, who elected to go through the form of marriage with other persons under the protection of the provisions of section 204, subsection (5), of "The Criminal Code Act, 1893," which runs: "No one commits bigamy by going through a form of marriage if he or she has been continually absent from his or her wife or husband for seven years then last past, and is not proved to have known that his wife or her husband was alive at any time during those seven years."

The total number of marriages solemnized (5,860) does not include marriages where both parties are of the aboriginal native race, such persons being exempted from the necessity of complying with the provisions of the Marriage Act, although at liberty to take advantage thereof. Fourteen marriages in which both parties were Maoris were contracted in 1900 in terms of the Act: 13 by Registrars, and 1 by a clergyman of the Church of England.

Bachelors and Spinsters in New Zealand.

The results of three censuses in respect of the number of bachelors of 20 years and upwards, and spinsters of 15 years and upwards, in the colony show some interesting features. While in 1886 there was an excess of bachelors over the spinsters amounting to 12,339 men, in 1891 the census gave an excess of 3,497 only, showing that a process of equalisation had been going on. But by 1896 not only had the preponderance of the male element been lost, but an excess of spinsters over bachelors was reported amounting to 1,786 women.

It is curious to notice how differently the numbers for the Provincial Districts have been affected by the process in operation. An excess of bachelors was preserved in Auckland, Taranaki, Hawke's Bay, Wellington, Marlborough, Nelson, and Westland from 1886 to 1896, but in all these cases except Taranaki it diminished very much. In Canterbury, however, an excess of spinsters was found in 1886 of 910, which increased to 2,516 in 1891, and to 3,997 in 1896; while in Otago an excess of 2,359 bachelors in 1886 changed to an excess of 773 spinsters in 1891, which increased to 2,066 in 1896: these two important districts of the Middle Island losing large numbers of bachelors by departures to the North Island.

The following table exhibits the excess of bachelors over spinsters or of spinsters over bachelors in each provincial district in 1886, 1891, and 1896:—

Provincial Districts.	Census, 1886.		Census, 1891.		Census, 1896.	
	Excess of Bachelors over Spinsters.	Excess of Spinsters over Bachelors.	Excess of Bachelors over Spinsters.	Excess of Spinsters over Bachelors.	Excess of Bachelors over Spinsters.	Excess of Spinsters over Bachelors.
Total excess ..	12,339	..	3,497	..	..	1,786
Auckland ..	2,996	..	156	..	703	..
Taranaki ..	242	..	121	..	524	..
Hawke's Bay ..	1,809	..	1,337	..	1,142	..
Wellington ..	2,225	..	2,129	..	637	..
Marlborough ..	607	..	644	..	183	..
Nelson	1,524	..	1,486	..	580	..
Westland ..	1,479	..	900	..	501	..
Canterbury ..	..	910	..	2,516	..	3,997
Otago	2,359	..	..	773	..	2,066
Chatham Islands	8	..	15	..	7	..
Kermadec Islands	..	..	..	2	..	..

Marriages by Ministers of various Denominations.

Of the marriages in the year 1900, 22·68 per cent. were solemnised by ministers of the Church of England, 26·38 per cent. by ministers of the Presbyterian Churches, 13·23 per cent. by ministers of the Wesleyan and other Methodist Churches, 10·82 per cent. by ministers of the Roman Catholic Church, 10·20 per cent. by ministers of other denominations, and 16·69 per cent. by Registrars.

The following shows the proportions of marriages by ministers of the principal denominations in the past eight years, and the percentages of these denominations to the total population:—

Denomination.	Percentage of Marriages.								Percentage of Denomination to Total Population in 1896.
	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	
Church of England	23·06	22·86	22·74	22·86	23·00	23·37	24·17	22·68	40·27
Presbyterians ..	26·58	25·30	24·32	25·01	25·44	26·02	25·30	26·38	22·78
Wesleyans and other Methodists	16·13	15·99	15·69	17·92	17·61	13·98	12 91	13·23	10·45
Roman Catholics ..	8·99	10·08	11·19	10·26	10·12	10·37	10·87	10·82	14·07
Other denominations	6·66	6·65	7·29	6·05	5·86	9·25	9 34	10·20	12·43
By Registrars ..	18·58	19·12	18·77	17·90	17·97	17·01	17·41	16·69	..
	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00

Marriage by the Registrar is found to be rather less frequent than it was eight years ago, the percentage falling from 18·58 in 1893 to 16·69 in 1900.

Marriage Register signed by Mark.

Of the men married in 1900, 31, or 5·29 in every 1,000, and of the women 30, or 5·12 per 1,000, signed the register by marks.

The illiteracy of the people, as measured by the proportion of married persons who affix marks instead of signatures to the marriage register, has greatly decreased of late, having fallen since 1881 from 32·04 per 1,000 among men to 5·29 per 1,000, and from 57·98 per 1,000 to 5·12 per 1,000 among women. This is shown in a very striking manner by the following table:—

Persons in every 1,000 Married who signed by Mark.

Denomination.	1881.		1891.		1900.	
	M.	F.	M.	F.	M.	F.
Church of England	16·59	27·15	8·29	10·66	3·01	5·27
Presbyterians	10·25	29·61	5·79	8·69	2·59	3·23
Wesleyans and other Methodists	32·41	41·79	8·93	10·71	3·88	5·16
Roman Catholics	117·78	133·33	31·33	18·28	9·46	6·31
Other denominations	10·36	20·72	9·26	..	1·67	..
By Registrars	39·22	93·51	27·42	43·08	13·29	10·22
Total marriages	32·04	57·98	13·93	16·82	5·29	5·12

The proportion of illiterates in 1900 was greatest among those married before Registrars. Previously the proportion was largest among Roman Catholics; but since 1881 it has, as shown by the table, most remarkably decreased.

Ages of Persons Married.

Of the persons married in 1900, 98 bridegrooms and 1,016 brides were under 21 years of age—six of the bridegrooms being between 18 and 19 years of age. Of the brides, one was under 15 years of age, three were between 15 and 16, and thirty-one between 16 and 17 years of age. The proportion of men married is greatest at the ages of 25 to 30, and of women at from 21 to 25 years.

The following are the proportions of men and women married at each age-period to every 100 marriages in the years 1888 and 1900:—

Age.	1888.		1900.	
	M.	F.	M.	F.
Under 21 years	1·85	24·30	1·67	17·34
21 and under 25	28·17	42·05	24·45	40·26
25 „ 30	33·81	21·15	38·33	26·65
30 „ 40	26·02	8·98	26·83	12·63
40 „ 50	6 69	2·74	5·53	2·03
50 „ 60	2·52	0 61	1·98	0·70
60 „ 70	0·88	0·14	1·02	0·37
70 and upwards	0·06	0·03	0·19	0·02

Registrars of Marriages are prohibited by law from issuing certificates for the marriage of minors without the consent of their parents or lawful guardians, if there be any in the colony. If a declaration be made in any case that there is no parent or lawful guardian in the colony, then a certificate may be issued after the expiration of fourteen days following the date on which the notice of intended marriage is given.

A marriage may not be solemnised except after the delivery to the minister or Registrar who officiates of a certificate issued by a Registrar authorising such marriage, and if any persons knowingly and wilfully intermarry without such certificate the marriage is null and void; and no clergyman or minister of any denomination is empowered to solemnise marriages until his name has been placed on the Registrar-General's list of officiating ministers for the year.

Marriage with a deceased wife's sister in New Zealand was legalised in the year 1880, and an Act was passed in the year 1900 which legalised marriage with the brother of a deceased husband. This Act is retrospective, including in its provisions marriages between such parties which had previously been solemnized as well as those contracted after the statute was passed, and declaring all these to be valid, and the issue born prior or subsequent to the passing of the Act to be deemed born in lawful wedlock.

The measure was reserved for the signification of her late Majesty's pleasure. The Royal assent has since been given, and the Act came into force in New Zealand by Proclamation dated the 22nd May, 1901.

The ages at which persons may contract binding marriages are the same as in England—12 years for females and 14 for males. Marriage may be contracted at earlier ages than those stated, but would be voidable at the discretion of either of the parties upon reaching the age of 12 or 14, as the case may be, and without the necessity of proceedings in Court.

Although in New Zealand the age at which girls may legally marry is as above; nevertheless, by the criminal law, to unlawfully carnally know a girl under the age of 16 years is now a punishable offence. The age of consent was raised from 15 to 16 by statute passed in 1896.

The average age of the men married in this colony in 1900 was 29·91 years, and of the women, 25·29 years. In England the mean age of those whose ages were stated was (in the year 1894) 28·41 years for men, and 26·15 years for women. Thus the average age at marriage in the colony is higher for men, but lower for women, than in England.

The proportion of bridegrooms under 21 is much greater in England than in New Zealand; but the proportion of brides under 21 is greater in the colony.

In England, in 1891–95, of every 1,000 bridegrooms whose ages were stated, 56 were under 21 years of age, and of every 1,000 brides 183 were under 21 years of age. In New Zealand, in 1900, the proportions were 17 bridegrooms and 173 brides of similar ages in every 1,000 married :—

Year.	Bridegrooms under 21 in every 100.	Brides under 21 in every 100.	Year.	Bridegrooms under 21 in every 100	Brides under 21 in every 100.
1888	1·85	24·30	1896	1·96	19·51
1890	1·89	22·75	1898	1·57	18·13
1892	1·62	20·14	1899	2·10	18·81
1894	1·44	19·53	1900	1·67	17·34

Number of Ministers.

The number of the clergy enumerated at the census of 1896 was 777. In 1891 the number returned was 732. Besides the regular clergy, there were, in 1896, 11 Mormon missionaries and 221 Salvation Army officers, of whom 112 were females; also 17 evangelists, 52 missionaries (11 women), and 45 preachers.

The number of names on the list of officiating ministers under the Marriage Act is (March, 1901) 961, and the denominations to which they belong are shown hereunder.

Number of Officiating Ministers, 31st March, 1901.

Denomination.	No.	Denomination.	No.
Church of England	316	Church of Christ	14
Presbyterian Church of New Zealand	119	Free Methodist Churches	5
Presbyterian Church of Otago and Southland	87	Auckland Central Mission	1
Roman Catholic Church	153	Christchurch Central Mission	1
Wesleyan Methodist Church	157	Independent Wesleyan	1
Congregational Independents	18	The Forward Movement	1
Baptists	24	Salvation Army	10
Primitive Methodist Connexion	33	Catholic Apostolic Church	4
Lutheran Church	9	Seventh-day Adventists	1
Hebrew Congregations	6	Unitarian Church	1
		Total	961

There were, at the time of the census of 1896, 25 theological students, 72 church officers such as sextons and others, and 82 members of religious orders not ministering to charity or education.

Deaths.

The deaths in 1900 numbered 7,200, being equivalent to a rate of 9·43 in every 1,000 persons living, as against 10·24 in 1899. The lowest rate experienced since the year 1887, when the deaths were 10·29 per 1,000 of the population, was that for 1896 (9·10).

The death-rate in New Zealand contrasts very favourably with that in the other Australasian Colonies and in European countries, as will be seen by the figures given for a series of years :—

Country.	1890.	1891.	1892.	1893.	1894.	1895.	1896	1897.	1898.	1899.	1900.
New Zealand ..	9·66	10·35	10·06	10·23	10·19	9·91	9·10	9·14	9·84	10·24	9·43
Queensland ..	13·59	12·77	12·66	13·34	12·08	11·38	12·10	11·33	12·66	12·07	..
New South Wales	12·90	14·24	12·20	13·24	12·36	11·79	12·30	10·88	12·48	11·82	..
Victoria ..	16·10	16·24	13·63	14·11	13·14	13·25	13·35	12·90	15·94	14·28	..
South Australia* ..	12·59	13·30	11·41	13·44	11·64	11·25	11·48	11·24	13·06	12·14	..
Western Australia	12·06	17·33	16·67	15·31	14·40	17·78	16·45	16·97	16·05	13·76	..
Tasmania ..	14·74	15·00	13·53	13·47	12·42	11·38	11·63	11·53	13·51	12·25	..
England and Wales	19·5	20·2	19·0	19·2	16·6	18·7	17·1	17·7	17·6	18·3	..
Scotland ..	19·7	20·7	18·6	19·5	17·2	19·7	16 9	18·8	18·4	18·6	..
Ireland	18·2	18·4	19·4	17·9	18·2	18·4	16·6	18·4	18·1	17·6	..
Denmark ..	19·0	20·0	19·4	18·9	17·5	16·9	15·7	16·6	15·6	17·5	..
Norway	17·9	17·5	17·8	16·3	16·9	15·7	15·2	15·2	15·2	16·8	..
Sweden	17·1	16·8	17·9	16·8	16·4	15·2	15·6	15·4	15·1	17·6	..
Austria	29·4	28·2	28·8	27·2	27·8	27·7	26·4	25·6	24·9	25·4	..
Hungary ..	32·4	33·1	35·0	31·1	30·4	29·6	28·8	28·4	27·9	27·0	..
Switzerland ..	21·0	20·6	19·2	20·4	20·5	19·6	18·3	18·2	18·9	17·6	..
German Empire ..	24·4	23·4	24·1	24·6	22·3	22·1	20·8	21·3	20·6	21.5	..
Netherlands ..	20·5	20·7	21·0	19·2	18·5	18·6	17·2	16·9	17·0	17·1	..
France	22·6	22·6	22·6	22·8	21·4	22·3	20·2	19·6	21·2	21·1	..
Italy	26·4	26·2	26·3	25·3	25·1	25·2	24·2	22·1	23·1	22·1	..

*Excluding the Northern Territory.

In this statement New Zealand is conspicuous as showing the lowest death-rate. The rates for the principal colonies in Australia are a little higher, but, generally speaking, far below those for the United Kingdom or the European Continental States mentioned in the table.

Deaths and Death-rates of the Four Principal Cities and their Suburbs.

In the earlier annual reports on the vital statistics of the four chief towns the central boroughs alone were dealt with, particulars respecting the suburbs not having been obtained. But this omission was held to be a grave defect, as the suburban death-rate may differ much from the death-rate at the centre. Steps were therefore taken early in 1895 to collect statistics of the suburban boroughs as well as of the four chief cities. As regards Auckland and Christchurch, the whole of the area usually recognised as suburban has not yet been brought under municipal government, and the statistics given below do not deal with such portions as still remain in road districts. The omission, however, is not very important, for there are in either case quite enough suburbs included within borough boundaries to give a fair idea of the death-rate of greater Auckland and greater Christchurch. As further boroughs are formed the vital statistics will be made to include them.

The total number of deaths registered for the four centres in 1900 was 2,104—viz., 1,379 in the cities, and 725 in the suburbs. In 1899 the number was 2,254: 1,523 in the cities, and 731 in the suburbs.

By including the suburbs the death-rate for last year is lowered at Auckland, Wellington, and Dunedin, but raised at Christchurch. The rates for the year are:—

	Death-rates per 1,000 of mean Population.
Auckland City	13·69
" and five suburban boroughs ..	11·81
Wellington City	9·17
" and three suburban boroughs ..	8·91
Christchurch City	10·62
" and four suburban boroughs ..	10·81
Dunedin City	12·25
" and eight suburban boroughs ..	11·34

MORTALITY AT FOUR CENTRES, INCLUDING SUBURBS.

If the suburbs are included, the death-rate is found to be highest in Auckland and lowest in Wellington; Christchurch and Dunedin taking second and third places respectively. The death-rate for the colony was 9·43 per 1,000 of mean population. The four centres might be expected to show a higher average than this, but the Wellington death-rate is lower than that for the whole colony.

If the number of deaths of infants under one year be excluded, the mortality among the rest of the population is found to have been for 1899 and 1900 in the following ratio to the 1,000 living:—

	1899.	1900.
Auckland (including suburbs)	8·40	8·26
Wellington "	7·91	7·05
Christchurch "	8·43	8·20
Dunedin "	9·99	9·58

The degree of infantile mortality is perhaps best shown in the proportion of deaths of children under one year of age to every 100 births. For 1899 and 1900 the proportions at the chief centres were,—

	1899.	1900.
Auckland (including suburbs)	14·17	12·78
Wellington "	11·79	7·32
Christchurch "	14·30	10·83
Dunedin "	9·25	7·95

Thus the proportions for Wellington and Dunedin are considerably less than that found at either of the other two chief cities. Again, the percentage of deaths of children under 5 to the total number of deaths is: in Auckland, 36·22; in Christchurch, 29·05; in Wellington, 23·80; and in Dunedin, only 19·20. The total of deaths under 5 is 574, or 27·28 per cent. of all deaths, as against 720 and 31·94 for 1899. The deaths of persons of 65 and upwards numbered 505 last year, the same as in 1899.

Mortality at Four Centres, excluding Suburbs.

Excluding suburbs, and dealing with the deaths at all ages in the four cities or central boroughs only, the rates for 1900 are found to be lower in Wellington, Christchurch, and Dunedin, but higher in Auckland than in the previous year. The total number of deaths, and the death-rates, for four years are given:—

Cities (excluding Suburbs).	Deaths, 1897.		Deaths, 1898.		Deaths, 1899.		Deaths, 1900.	
	No.	Per 1,000 of Population.	No.	Per 1,000 of Population.	No.	Per 1,000 of Population.	No.	Per 1,000 of Population.
Auckland ..	416	12·99	483	14·22	499	13·02	480	13·69
Wellington ..	463	12·03	516	12·47	477	11·16	401	9·17
Christchurch ..	226	13·15	192	10·87	230	12·68	206	10·62
Dunedin ..	273	11·81	298	12·73	317	13·47	292	12·25

By omitting the deaths of infants under one year, and calculating the rate on the population of one year of age and upwards, the position of the four cities as regards magnitude of death-rate in 1900 remains unaltered.

	Deaths per 1,000 of Population, excluding Infants (under One Year of Age).			
	1897.	1898.	1899.	1900.
Auckland (excluding suburbs) ..	9·64	9·86	9·53	9·72
Wellington " ..	9·35	9·18	8·39	7·65
Christchurch " ..	10·65	8·85	9·16	8·22
Dunedin " ..	10·70	10·87	11·59	10·64

Subjoined is a table showing the rates of infant mortality in the four cities for each of the past five years, together with the mean rates for the period.

	Deaths of Children under One Year to every 100 Births.					
	1896.	1897.	1898.	1899.	1900.	Mean of Five Years.
Auckland (excluding suburbs) ..	16·48	12·80	17·14	14·47	14·49	15·08
Wellington " ..	10·05	10·59	13·71	12·26	6·65	10·65
Christchurch " ..	12·97	12·50	10·00	19·71	11·99	13·43
Dunedin " ..	7·83	6·22	9·66	10·20	8·37	8·46

Causes of Death at Four Centres, including Suburbs.

While treating of the death-rates at the chief cities and surroundings, it is desirable to refer to the causes of mortality, which is done in the remarks that follow. The deaths for the whole colony, classified according to their cause, are treated of at length a little further on.

Specific Febrile and Zymotic Diseases (at Four Chief Centres).

The mortality from these diseases at all the four centres, with their suburbs, was much lower in 1900 than in 1899 or 1898.

Growth of population can only be said to account for a very small part of the increase. The total deaths in this class for the four towns were 304 for 1898, 360 for 1899, and only 214 for 1900.

Deaths from Febrile and Zymotic Diseases.

	Auckland and Suburbs.	Wellington and Suburbs.	Christchurch and Suburbs.	Dunedin and Suburbs.	Total.
1900	93	37	43	41	214
1899	110	62	104	84	360
1898	117	99	44	44	304

Of the above, diarrhœal diseases caused most deaths in 1900 at the four centres taken together, the total number being 93. Influenza came next, with 38 deaths, typhoid fever 21, diphtheria 21, whooping-cough 8, measles, scarlet fever, and bubonic plague 1 each, and other zymotic complaints 30. Diarrhœa was most prevalent at Auckland (57 deaths).

Comparison of the deaths for each city shows,—

Zymotic, &c., Diseases.	Auckland and Suburbs.		Wellington and Suburbs.		Christchurch and Suburbs.		Dunedin and Suburbs.	
	1899.	1900.	1899.	1900.	1899.	1900.	1899.	1900.
Diarrhœal diseases	39	57	16	11	61	11	26	14
Influenza	9	10	9	5	5	9	19	14
Typhoid fever	16	8	9	8	5	3	6	2
Measles	12	..	3	1	13	..	9	..
Scarlet fever	..	..	..	..	..	1	..	..
Bubonic Plague	..	1	..	..	..	..	..	..
Diphtheria	2	5	3	6	11	7	3	3
Whooping cough	23	..	20	..	2	6	9	2
Other zymotic diseases	9	12	2	6	7	6	12	6

Parasitic Diseases (at Four Chief Centres).

Hydatids were fatal at Auckland (1 death) and Dunedin (2 deaths) These, with 1 death from thrush at Auckland, make a total of 4.

Dietetic Diseases (at Four Chief Centres).

These numbered 25, of which 16 were attributed to intemperance; 5 being due to want of breast-milk, or malnutrition, and 4 to other causes, privation, &c.

Constitutional Diseases (at Four Chief Centres).

From these, deaths at the four towns numbered 457 in 1900. The first in importance of these diseases, and of all causes of death, is tubercle. The figures for 1899 and 1900 show 264 and 266 deaths for each year respectively.

Phthisis and other Tubercular Diseases (at Four Chief Centres).

	1899.		1900.	
	Phthisis.	Other Tubercular Diseases.	Phthisis.	Other Tubercular Diseases.
Auckland and suburbs	59	18	47	15
Wellington "	46	12	57	12
Christchurch "	36	22	47	7
Dunedin "	56	15	53	28
	197	67	204	62

The mortality from tubercular diseases for 1900 was 13·00 per cent. of the total deaths at the four boroughs from all causes.

Deaths from cancer at the chief towns decreased in number from 151 in 1899 to 145 in 1900. The latter number is 6·89 per cent. of deaths for the year from all causes.

Diabetes showed 15 deaths, the same number as in 1899.

Developmental Diseases (at Four Chief Centres).

There were 193 deaths in this class; 87 of which were from premature birth, and 84 from old age.

Local Diseases (at Four Chief Centres).

Deaths in this class were 11 more than in 1899, the figures being 1,018 against 1,007. Diseases of the respiratory system showed 182 deaths for 1900, or more than one-fifth of the whole mortality in the class, against 245 in the former year. Bronchitis, pneumonia, congestion of lungs, pleurisy, and allied diseases form this group.

Under the head of "diseases of the digestive system" there were 181 deaths at the four centres, including 60 from enteritis; peritonitis, 18; gastritis, 9; cirrhosis of liver, 8; jaundice, 11; and dentition, 11.

Diseases of the urinary system caused 82 deaths. The remaining deaths were: 256 from nervous diseases, 1 disease of organs of special sense, 272 of organs of the circulatory system, 6 of the lymphatic, 31 of the reproductive system, 4 of the organs of locomotion, and 3 of the integuments.

Violent Deaths (at Four Chief Centres).

There were 110 violent deaths at the cities and suburbs, 90 of which were classed as accidental. Seven of these latter were caused by fractures, and 9 by falls. In 18 cases death resulted from the deceased being run over by cab, cart, wagon, or train. Six deaths were from burns or scalds, 19 by drowning, 8 by suffocation, 4 by poisoning, 4 by misadventure with ether or chloroform, besides 1 from accident at birth, and 14 others.

Seven deaths were returned as homicidal, murder, manslaughter, &c.

Of 13 suicides, 3 were by shooting, 2 by cutting throat, 2 by poison, 3 by hanging, 2 by drowning, and 1 by placing himself on the railway-line.

VITAL STATISTICS OF AUSTRALASIAN CAPITALS, 1899.

The vital statistics of the chief cities, *with their suburbs*, of the Australasian Colonies, show that the death-rate in Wellington (N.Z.) for 1899 was lower than that of any other of the principal towns for the same year.

Capital Cities (including Suburbs).	Estimated Mean Population.	Births.		Deaths.		Excess of Births over Deaths.
		Total Number.	Rate per 1,000 of Population.	Total Number.	Rate per 1,000 of Population.	
Melbourne ..	475,380	12,435	26·16	7,317	15·39	5,118
Sydney	432,625	12,239	28·29	5,511	12·74	6,728
Adelaide ..	148,644	4,165	28·02	2,260	15·20	1,905
Brisbane * ..	119,728	3,251	27·15	1,313	10·97	1,938
Perth	37,105	1,266	34·12	607	16·36	659
Hobart ..	41,040	842	20·52	576	14·04	266
Wellington ..	47,535	1,187	24·97	516	10·86	671

* Ten-mile radius.

DEATHS IN THE WHOLE COLONY AT VARIOUS AGE-PERIODS.

The average age at death of persons of either sex, in each of the six years, 1895–1900, was as follows :—

	Males.	Females.
1895	36·21 years	30·17 years.
1896	36·80 "	32·41 "
1897	38·80 "	34·77 "
1898	39·29 "	35·69 "
1899	37·73 "	33·54 "
1900	40·31 "	36·14 "

From a mortality table, constructed by the Assistant Actuary of the Government Life Insurance Department for his own purposes, it appears that out of every 1,000 males born 662 reach the age of 50 years, 614 the age of 55, 550 the age of 60, and 471 the age of 65. For females, 688 out of every 1,000 born live to 50 years, 648 to 55, 598 to 60, and 530 to 65. These results must not be regarded as put forward by authority of the department.

Subjoined is a classified statement of the deaths of infants under one year during 1900, with the ratio of the deaths in each class to the 1,000 births during the year :—

Year.	Sex.	Under 1 Month.	1 and under 3 Months.	3 and under 6 Months.	6 and under 12 Months.	Total under 12 Months.
	NUMBER OF DEATHS.					
1900 ..	Male	345	159	167	148	819
	Female	262	129	126	133	650
	DEATHS TO THE 1,000 BIRTHS.					
1900 ..	Male	34·13	15·73	16·52	14·64	81·03
	Female	27·76	13·67	13·35	14·09	68·86

Eighty-one out of every thousand of male children born, and sixty-nine of every thousand females, are found to have died before attaining the age of one year. The mortality is thus one in twelve of male children and one in fifteen of females, even in New Zealand, where conditions are far more favourable to infant life than in Australia, at least as far as relates to the cities.

It will also be seen from the figures that the chances of living during the first year of age are far greater for female than for male infants. Thus, during the year 1900 there were—

100	deaths of males to	81	deaths of females	under 1 month of age;
100	"	87	"	from 1 to 3 months of age;
100	"	81	"	from 3 to 6 months of age;
100	"	96	"	from 6 to 12 months of age;
100	"	85	"	under 12 months of age.

The rates of infantile mortality—that is, the proportion the deaths of children under one year of age bear to the births—are higher in the Australian Colonies than in New Zealand.

Causes of Death (the whole Colony).

The deaths registered in the colony during the last five years, when distributed among the several classes according to their assigned causes, give the rates shown hereunder:—

Causes of Death.	Rate per 10,000 living.				
	1896.	1897.	1898.	1899.	1900.
Zymotic diseases	10·24	8·44	10·99	12·41	9·23
Parasitic diseases	0·24	0·18	0·37	0·38	0·30
Dietetic diseases	0·86	0·84	0·87	1·03	0·93
Constitutional diseases	17·06	17·99	18·81	18·75	17·76
Developmental diseases	7·25	7·46	8·80	9·64	9·15
Local diseases	43·31	45·30	46·86	48·69	45·63
Violence	8·32	7·55	7·43	7·23	7·53
Ill-defined and not-specified causes ..	3·72	3·63	4·26	4·27	3·76
All causes	91·00	91·39	98·39	102·40	94·29

The next table shows that forty-eight in every one hundred deaths in 1900 were from local diseases, of which diseases of the respiratory system formed 11 per cent., diseases of the circulatory system 12 per cent., and of the nervous system 11 per cent., while diseases of the digestive system contributed 9 per cent. Constitutional diseases, including, with others, phthisis and cancer, comprised 19 per cent. of the total mortality. Ten per cent. of deaths were from zymotic causes, including 5·85 per cent. from miasmatic diseases, and 2·76 per cent. from diarrhœal. Deaths from developmental diseases come next in proportion, being 9·71 per cent. of the whole, followed by violent deaths, with 7·99 per cent.

Causes of Death.	Number of Deaths.			Proportion to Total Deaths.			Proportion per 10,000 living, 1900.	Proportion per 10,000 living, 1899.
	Male.	Female.	Total.	Male.	Female.	Total.		
				Per Cent.	Per Cent.	Per Cent.		
Class I. Specific febrile or zymotic diseases,—								
Order 1. Miasmatic diseases	222	200	422	5·34	6·56	5·86	5·53	7·36
" 2. Diarrhœal diseases	106	93	199	2·55	3·05	2·76	2·61	3·97
" 3. Malarial diseases	...	...	...	...	..	...	...	...
" 4. Zoogenous diseases	...	...	...	...	...	...	...	...
" 5. Venereal diseases	13	11	24	0·31	0·36	0 33	0·31	0·32
" 6. Septic diseases	18	42	60	0·44	1·38	0·84	0·78	0·76
Total Class I.	359	346	705	8·64	11·35	9·79	9·23	12·41
Class II. Parasitic diseases	19	4	23	0·46	0·13	0·32	0·30	0·38
Class III. Dietetic diseases	51	20	71	1·23	0·65	0·98	0·93	1·03
Class IV. Constitutional diseases	740	616	1,356	17·82	20·22	18·83	17·76	18·75
Class V. Developmental diseases	395	304	699	9·51	9·98	9·71	9·15	9·64
Class VI. Local diseases,—								
Order 1. Diseases of nervous system	419	341	760	10·09	11·19	10·57	9·95	10·77
" 2. Diseases of organs of special sense	6	4	10	0·14	.0·13	0·14	0·13	0·09
" 3. Diseases of circulatory system	507	341	848	12·21	11·19	11·78	11·11	10·64
" 4. Diseases of respiratory system	460	342	802	11·08	11·22	11·14	10·50	13·16
" 5. Diseases of digestive system	338	309	647	8·14	10·14	8·98	8·47	8·66
" 6. Diseases of lymphatic system	12	12	24	0·29	0·40	0·33	0·32	0·40
" 7. Diseases of urinary system	206	81	287	4·96	2·66	3·98	3·76	3·40
" 8. Diseases of reproductive system,—								
(*a.*) Of organs of generation	1	24	25	0·02	0·79	0·35	0·33	0·15
(*b.*) Of parturition	...	51	51	...	1·67	0·71	0·67	0·95
" 9. Diseases of locomotive system	9	7	16	0·22	0·23	0·22	0·21	0·25
" 10. Diseases of integumentary system	5	9	14	0·12	0·30	0·19	0·18	0·22
Total Class VI.	1,963	1,521	3,484	47·27	49·92	48·39	45·63	48·69
Class VII. Violence,—								
Order 1. Accident or negligence	405	91	496	9·75	2·99	6·89	6·50	6·16
" 2. Homicide	7	4	11	0·17	0·13	0·15	0·14	0·12
" 3. Suicide	57	11	68	1·37	0·36	0·95	0·89	0·95
" 4. Execution	...	...	...	...	...	...	...	...
Total Class VII.	469	106	575	11·29	3·48	7·99	7·53	7·23
Class VIII. Ill-defined and not-specified causes	157	130	287	3·78	4·27	3·99	3·76	4·27
Grand totals	4,153	3,047	7,200	100·00	100·00	100·00	94·29	102·40

The next table shows, for either sex, the number of deaths from each cause registered during the year 1900 :—

CAUSES OF DEATH.

Class.	Causes of Death. — Orders and Diseases.	Males.	Females.	Total.
I.—Specific Febrile or Zymotic Diseases.	Order 1.—*Miasmatic.*			
	Small-pox	...	...	...
	Chicken-pox	...	...	...
	Measles	6	3	9
	Epidemic rose-rash, rubeola	...	...	...
	Scarlet fever, scarlatina	4	6	10
	Typhus	...	...	...
	Bubonic plague	1	...	1
	Dengue	...	...	...
	Relapsing fever	...	...	...
	Influenza	99	82	181
	Whooping-cough ...	44	46	90
	Mumps	...	...	...
	Diphtheria	27	36	63
	Cerebro-spinal fever ...	...	...	...
	Simple and ill-defined fever	...	...	...
	Enteric fever, typhoid ...	41	27	68
	Other miasmatic diseases	...	...	...
	Total Order 1 ...	222	200	422
	Order 2.—*Diarrhœal.*			
	Simple cholera	13	3	16
	Diarrhœa	87	88	175
	Dysentery	6	2	8
	Total Order 2 ...	106	93	199
	Order 3.—*Malarial.*			
	Remittent fever... ...	...	...	...
	Ague	...	...	...
	Beriberi	...	...	...
	Total Order 3 ...	...	...	...
	Order 4.—*Zoogenous.*			
	Hydrophobia	...	...	...
	Glanders	...	...	...
	Splenic fever	...	...	...
	Cow-pox and other effects of vaccination... ...	...	...	...
	Total Order 4 ...	...	...	...
	Order 5.—*Venereal.*			
	Syphilis	8	11	19
	Gonorrhœa, stricture of urethra, ulcer of groin	5	...	5
	Total Order 5 ...	13	11	24
	Order 6.—*Septic.*			
	Phagedæna	1	...	1
	Erysipelas	8	7	15
	Pyæmia, septicæmia ...	9	11	20
	Puerperal fever, pyæmia, septicæmia	...	24	24
	Total Order 6 ...	18	42	60
	Total Class I. ...	359	346	705
II.—Parasitic Diseases.	Thrush	8	1	9
	Other diseases from vegetable parasites ...	...	...	...
	Hydatid disease ...	11	3	14
	Worms	...	...	...
	Other diseases from animal parasites	...	...	...
	Total Class II. ...	19	4	23
III.—Dietetic Diseases.	Starvation	7	...	7
	Want of breast-milk ...	9	3	12
	Scurvy	...	...	...
	Intemperance—			
	Chronic alcoholism ...	31	11	42
	Delirium tremens ...	...	...	...
	Other dietetic diseases ...	4	6	10
	Total Class III. ...	51	20	71
IV.—Constitutional Diseases.	Rheumatic fever ...	28	20	48
	Rheumatism	6	6	12
	Gout	3	...	3
	Rickets	2	...	2
	Cancer	246	184	430
	Tabes mesenterica, tubercular peritonitis ...	19	21	40
	Tubercular meningitis, acute hydrocephalus ...	43	36	79
	Phthisis	312	265	577
	Other forms of tuberculosis, scrofula	29	27	56
	Purpura, hæmorrhagic diathesis	8	6	14
	Anæmia, chlorosis, leucocythæmia	16	15	31
	Diabetes mellitus ...	25	32	57
	Other constitutional diseases	3	4	7
	Total Class IV. ...	740	616	1,356
V.—Developmental Diseases.	Premature birth ...	155	121	276
	Atelectasis	9	3	12
	Cyanosis	5	8	13
	Spina bifida	9	3	12
	Imperforate anus ...	...	...	...
	Cleft palate, hare-lip ...	1	...	1
	Other congenital defects	8	9	17
	Old age	208	160	368
	Total Class V. ...	395	304	699
VI.—Local Diseases	Order 1.—*Diseases of Nervous System.*			
	Inflammation of the brain or its membranes	44	49	93
	Cerebro-spinal meningitis	...	6	12
	Apoplexy	122	108	230
	Softening of brain ...	10	9	19
	Hemiplegia, brain paralysis	16	20	36

CAUSES OF DEATH—*continued.*

Class.	Causes of Death. Orders and Diseases.	Males.	Females.	Total.
VI.—LOCAL DISEASES—*continued.*	ORDER 1.—*Diseases of Nervous System*—contd.			
	Paralysis (undescribed)...	41	27	68
	Paralysis agitans ...	1	...	1
	Insanity, general paralysis of insane	23	12	35
	Chorea	1	...	1
	Epilepsy	21	20	41
	Convulsions	85	52	137
	Laryngismus stridulus ...	1	...	1
	Idiopathic tetanus ...	2	2	4
	Paraplegia, diseases of spinal cord	8	8	16
	Locomotor ataxia ...	4	2	6
	Other diseases of nervous system	34	26	60
	Total Order 1 ...	419	341	760
	ORDER 2.—*Diseases of Organs of Special Sense.*			
	Otitis, otorrhœa... ...	6	4	10
	Epistaxis, and diseases of nose	...	...	...
	Ophthalmia, and diseases of eye	...	...	...
	Total Order 2 ...	6	4	10
	ORDER 3.—*Diseases of Circulatory System.*			
	Endocarditis, valvular disease	326	235	561
	Pericarditis	4	2	6
	Hypertrophy of heart ...	3	1	4
	Fatty degeneration of heart	29	29	58
	Angina pectoris... ...	20	7	27
	Syncope	77	45	122
	Aneurism	27	4	31
	Senile gangrene... ...	8	3	11
	Embolism, thrombosis ...	10	14	24
	Phlebitis	...	1	1
	Varicose veins, piles ...	2	...	2
	Other diseases of circulatory system	1	...	1
	Total Order 3 ...	507	341	848
	ORDER 4.—*Diseases of Respiratory System.*			
	Laryngitis	10	6	16
	Croup	21	7	28
	Other diseases of larynx and trachea	3	...	3
	Asthma, emphysema ...	11	9	20
	Bronchitis	180	126	306
	Pneumonia	176	138	314
	Pleurisy...	22	23	45
	Other diseases of respiratory system	37	33	70
	Total Order 4 ...	460	342	802

Class.	Causes of Death. Orders and Diseases.	Males.	Females.	Total.
VI.—LOCAL DISEASES—*continued.*	ORDER 5.—*Diseases of Digestive System.*			
	Stomatitis, cancrum oris	...	3	3
	Dentition	17	14	31
	Sore throat, quinsy ...	9	4	13
	Dyspepsia	5	3	8
	Hæmatemesis	1	1	2
	Melæna	2	3	5
	Diseases of stomach, gastritis	45	37	82
	Enteritis	83	96	179
	Ulceration, perforation, of intestine	4	4	8
	Ileus, obstruction of intestine	21	24	45
	Stricture or strangulation of intestine	9	..	9
	Intussusception of intestine	7	3	10
	Hernia	8	11	19
	Fistula	...	...	...
	Peritonitis	31	42	73
	Ascites	...	1	1
	Gall-stones	4	6	10
	Cirrhosis of liver ...	32	7	39
	Other diseases of liver, hepatitis, jaundice ..	42	31	73
	Other diseases of digestive system	18	19	37
	Total Order 5 ...	338	309	647
	ORDER 6.—*Diseases of Lymphatic System and Ductless Glands.*			
	Diseases of lymphatic system	6	...	6
	Diseases of spleen ...	..	3	3
	Bronchocele	1	7	8
	Addison's disease ...	5	2	7
	Total Order 6 ...	12	12	24
	ORDER 7.—*Diseases of Urinary System.*			
	Acute nephritis	19	12	31
	Bright's disease ...	94	57	151
	Uræmia	13	4	17
	Suppression of urine ...	1	...	1
	Calculus	2	2	4
	Hæmaturia	2	...	2
	Diseases of bladder and prostate	50	4	54
	Other diseases of urinary system (kidney diseases undescribed)	25	2	27
	Total Order 7 ...	206	81	287
	ORDER 8.—*Diseases of Reproductive System.*			
	(*a.*) Diseases of organs of generation,—			
	Ovarian disease ...	...	5	5

CAUSES OF DEATH—*continued.*

Class.	Causes of Death. Orders and Diseases.	Males.	Females.	Total.
VI.—LOCAL DISEASES—*continued.*	ORDER 8.—*Diseases of Reproductive System*—ctd.			
	(*a.*) Diseases of organs of generation—*ctd.*			
	Diseases of uterus and vagina	...	16	16
	Disorders of menstruation	...	1	1
	Pelvic abscess	1	2	3
	Perineal abscess ...	...	...	...
	Diseases of testes, penis, scrotum, &c.	...	...	...
	(*b.*) Diseases of parturition,—			
	Abortion, miscarriage ...	...	8	8
	Puerperal mania ...	...	1	1
	Puerperal metritis ...	...	...	...
	Puerperal convulsions ...	...	8	8
	Placenta prævia (flooding)	...	14	14
	Phlegmasia dolens ...	...	2	2
	Other accidents of childbirth	...	18	18
	Total Order 8 ...	1	75	76
	ORDER 9.—*Diseases of Organs of Locomotion.*			
	Caries, necrosis	3	4	7
	Arthritis, ostitis ...	3	...	3
	Other diseases of organs of locomotion	3	3	6
	Total Order 9 ...	9	7	16
	ORDER 10.—*Diseases of Integumentary System.*			
	Carbuncle	1	1	2
	Phlegmon, cellulitis ...	3	3	6
	Lupus	1	...	1
	Ulcer, bed-sore	...	2	2
	Eczema	...	1	1
	Pemphigus	...	1	1
	Other diseases of integumentary system ...	...	1	1
	Total Order 10 ...	5	9	14
	Total Class VI. ...	1,963	1,521	3,484
VII.—VIOLENCE.	ORDER 1.—*Accident or Negligence.*			
	Fractures, contusions ...	200	24	224
	Gunshot wounds ...	11	1	12
	Cut, stab	7	2	9
	Burn, scald	22	25	47
	Sunstroke	3	...	3
	Poison	11	9	20
	Drowning	121	12	133
	Suffocation	20	13	33
	Otherwise	10	5	15
	Total Order 1 ...	405	91	496
	ORDER 2.—*Homicide.*			
	Murder, manslaughter ...	7	4	11
	Wounds in battle ...	...	...	...
	Total Order 2 ...	7	4	11
	ORDER 3.—*Suicide.*			
	Gunshot wounds ...	15	...	15
	Cut, stab	9	1	10
	Poison	7	5	12
	Drowning	11	4	15
	Hanging	12	1	13
	Otherwise	2	...	2
	Total Order 3 ...	57	11	68
	ORDER 4.—*Execution.*			
	Hanging	...	...	...
	Total Class VII. ...	469	106	575
VIII.—ILL-DEFINED AND NOT-SPECIFIED CAUSES.	Dropsy	2	...	2
	Marasmus, &c.	144	122	266
	Mortification, gangrene ...	...	1	1
	Tumour	2	2	4
	Abscess	1	2	3
	Hæmorrhage	...	...	...
	Sudden (cause unascertained)	8	3	11
	Other ill-defined and not-specified causes ...	...	...	...
	Total Class VIII. ...	157	130	287
	General totals ...	4,153	3,047	7,200

MORTALITY FROM ZYMOTIC AND FEBRILE DISEASES.

The deaths in 1900 from specific febrile or zymotic diseases amounted to 705, a proportion of 9·23 in every 10,000 persons living, and a decrease of 226 on the number of deaths in 1899, when the proportion was 12·41. A reduced mortality from measles, whooping-cough, and enteric diseases were the main causes of the decreased death-rate in this class.

The following are the diseases in this class that have caused the greatest mortality during the past ten years:—

Diseases.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.
Measles	1	..	525	14	..	1	1	56	137	9
Scarlet fever and scarlatina	24	4	1	5	..	4	2	2	..	10
Diphtheria ..	86	195	128	92	76	74	49	45	58	63
Whooping-cough ..	242	115	55	190	150	24	2	6	123	90
Influenza ..	210	144	106	233	125	89	120	219	135	181
Diarrhœal diseases	319	329	193	207	232	334	257	275	298	199
Enteric or typhoid fever	119	134	97	115	94	124	106	120	93	68
Puerperal fever ..	27	29	24	38	32	10	18	19	15	24

Measles, which was epidemic in 1893, caused only 16 deaths in the four succeeding years; but in 1898 the mortality rose to 56 and in 1899 to 137 deaths, falling again to 9 deaths in 1900. From scarlatina there were 10 deaths last year. The mortality from diphtheria rose from 45 deaths in 1898 to 58 in 1899, and 63 in 1900.

Whooping-cough in 1894 destroyed 190 lives, and 150 in 1895, but was in 1896, 1897, and 1898 much less fatal. In 1899 the mortality sprang up again to a total of 123 deaths, against 90 in 1900. In 1891 there were 242 deaths from this cause.

Influenza, the deaths from which were 89 in 1896, 120 in 1897, and 219 in 1898, caused 135 deaths in 1899, and 181 in 1900.

From diarrhœal complaints the deaths in 1900 were 199, against 298 in 1899, or 76 less than in 1898; while in 1896 the mortality reached the height of 334 deaths, and in 1889 was even higher (355), with a much smaller population than in 1900. Diarrhœal diseases are the most fatal of the order "zymotic and febrile," influenza coming second for the year 1900, whooping-cough third, and enteric fever fourth.

Enteric or typhoid fever was less fatal in 1900 than in 1899, the figures being 68 deaths, against 93 for the former year. The highest mortality during the decennium was in 1892, when the deaths numbered 134 for the colony.

Bubonic Plague Prevention.

The year 1900 saw the outbreak of the disease known as the bubonic plague in Sydney and other parts of Australia. Special provisions to check and prevent this disease in New Zealand were made by a temporary measure, which ceased to have force on the tenth day after the close of the session of Parliament.

To meet emergency, the Act conferred all the powers on the Governor held by Local Boards of Health, together with full and absolute powers to direct, require, and enforce in such manner and by

such means as he judged fit; and everything done by the Governor under the above provision was deemed to be an act of State, and not to be questioned in any Court.

One death was registered in the year as from this cause. It occurred at Auckland.

VACCINATION.

From small-pox there were no deaths. The vaccinations registered for the last ten years are as under :—

Year.	Total Vaccinations registered.	Number of Births registered.	Proportion of Successful Vaccinations of Children under 1 Year of Age to Total Births. Per Cent.	Proportion of Successful Vaccinations of Children under 14 Years of Age to Total Births. Per Cent.
1900 ..	4,525	19,546	16·12	23·15
1899 ..	5,133	18,835	17·94	27·25
1898 ..	10,349	18,955	29·05	54·60
1897 ..	12,440	18,733	32·89	66·41
1896 ..	11,917	18,612	30·78	64·03
1895 ..	8,523	18,546	31·72	44·34
1894 ..	9,322	18,528	32·42	50·31
1893 ..	7,412	18,187	28·09	40·75
1892 ..	8,216	17,876	32·41	45·96
1891 ..	9,284	18,273	38·81	50·81

The number of successful vaccinations registered in 1900 was only 4,525, against 5,133 in 1899 and 10,349 in 1898. The fall is consequent on the alteration of the law relative to vaccination in England, and subsequently in this colony.

One child in every six is shown to have been successfully vaccinated in the year 1900, and for a matter so peculiar as vaccination, and under the circumstances, the above results are quite as much as could reasonably be expected. The procedure under the new law as regards vaccination is similar to that previously in force. The Registrar issues a notice when a birth is registered, with forms for certificate as to the result of vaccination attached. Vaccination is still compulsory, if exemption is not secured in four months from date of birth. But everything is now subject to the provisions of the "exemption clause," which is the main feature, and governs the rest. Any parent or custodian who has conscientious objections—believing that vaccination would be injurious to the child's health—can apply for a certificate of exemption to a Magistrate or Registrar of Births.

The "conscience clause" runs as follows :

170. The foregoing provisions of this Part of this Act shall be construed subject to the following special provisions for exemption, that is to say :—

(1.) At any time within four months after the birth of a child, or, in the case of a child born before the commencement of this Act, then at any time within four months after such commencement, the child's parent or custodian, if conscientiously of opinion that vaccination would be prejudicial to the child's health, may apply to any Stipendiary Magistrate or Registrar for a certificate of exemption.

(2.) If satisfied that such conscientious objection exists, the Magistrate or Registrar may grant and issue to the applicant parent or custodian a certificate of exemption from this Part of this Act, in the form numbered nine in the Third Schedule hereto.

(3.) When issuing the certificate of exemption, the Magistrate or Registrar shall transmit a duplicate thereof to the Vaccination Inspector of the vaccination district in which the child is resident, and the Inspector shall enter a minute thereof in his register.

(4.) The application shall be supported by a statutory declaration, and by such other evidence as the Magistrate or Registrar in each case thinks reasonable, and no fee shall be payable in respect of either the application or the certificate.

(5.) The effect of the certificate shall be to exempt the parent or custodian named therein from all liability under this Part of this Act in respect of the non-vaccination of the child named in the certificate.

When no exemption certificate is obtained, the law now allows *twelve months* instead of *six* from date of birth in which to vaccinate to the parent, and a similar period from date of taking charge of child in case of a custodian. There are penalties for not vaccinating as before. One conviction for neglecting to vaccinate a child removes liability until the child is four years of age.

The main features of the new English law include a system of domiciliary visitation by public vaccinators, in substitution for that requiring children to be taken to vaccination stations, and exemption of parents and others from any penalty for not vaccinating children on production to the proper officer of a magistrate's certificate to the effect that he is satisfied as to the conscientious objections raised. Vaccination with glycerinated calf lymph, or other lymph issued by Local Government Boards is offered by the Government. The Act continues in force until the beginning of the year 1904.

Parasitic Diseases.

There were 23 deaths from parasitic diseases, the proportion per 10,000 living being 0·30. Deaths from hydatids decreased from 22 in 1899 to 14 in 1900.

Dietetic Diseases: Mortality in Liquor Trade (England).

Under the class "Dietetic Diseases" are included 42 deaths from intemperance. But these cannot be said to represent the full extent of the mortality really caused by the abuse of alcoholic

liquors. Many deaths of intemperate persons are attributed to disease of the liver, kidneys, &c., in the medical certificates.

The mortality of persons engaged in the liquor trade has been calculated for England, and the conclusions drawn are quoted:—"The mortality of persons directly engaged in the supply of spirituous liquors still continues to be enormous. Up to the age of twenty-five years brewers experience little more than the average mortality, but after that age the baneful influence of their employment rapidly becomes apparent. Their mortality throughout the main working period of life exceeds that of occupied males by about 50 per cent. At all ages after the twentieth year publicans are subject to a death-rate which is much higher than the average among occupied males, while at the age-groups 25–35 and 35–45 years the rates are just double the average. . . . The comparative mortality figure of brewers is 1,427, that of publicans is 1,838 in London, 1,948 in the industrial districts, and 1,348 in the agricultural districts, as against 953—the standard figure for occupied males. . . . Taking publicans without distinction of locality, a table shows that they die seven times as fast as do occupied males from alcoholism, 6½ times as fast from diseases of the liver, six times as fast from gout, and more than double as fast from diseases of the urinary system, from rheumatic fever, from diabetes, and from suicide.

"Among publicans in London the case is in some respects worse. Their mortality from all causes is nearly double that of all occupied males taken as a standard. They die nearly ten times as fast from alcoholism, 3¾ times as fast from diseases of the liver, and more than twice as fast from affections of the urinary organs and from suicide."

Constitutional Diseases: Phthisis, Cancer, etc.

The deaths from constitutional diseases in 1900 numbered 1,356, or 17·76 per 10,000 of population, and 19 out of every 100 deaths from all causes. This class of disease is more fatal than any other except that defined as "Local diseases," on account of the great numbers of deaths from cancer and phthisis, with other tubercular complaints, which are classed as "Constitutional."

From phthisis there are more deaths than from any other cause. The number of deaths was 577 in 1900, against 593 in 1899, 597 in 1898, and 596 in 1897. The deaths in 1900 were in the proportion of 7·56 in every 10,000 persons living, against 7·91 in the previous year.

Figures for ten years are quoted, showing that the total number of deaths from this disease for 1898 was the highest recorded during the decennium, though the rate had been slightly higher in some of the previous years.

Year.	Deaths from Phthisis.	Rate per 10,000.
1891	495	7·86
1892	524	8·16
1893	545	8·24
1894	576	8·48
1895	553	7·99
1896	523	7·40
1897	596	8·26
1898	597	8·11
1899	593	7·91
1900	577	7·56

In all the Australasian Colonies the rate is materially increased by the deaths of persons who have come out either already suffering from phthisis or predisposed thereto. There is no reason for believing that this circumstance has more effect on the death-rate in Australia than in New Zealand; so that the lower rate referred to in previous issues of this work as obtaining in this colony may be taken as proof of the superiority of its climate for withstanding consumptive tendencies.

The death-rate of England and Wales from phthisis, though declining, is far higher than that of New Zealand. In 1896 it stood at 13·07 per 10,000, which is the lowest rate on record.

Phthisis is now known to be and is treated as an infectious preventible disease caused by the bacillus tuberculosis, which is communicable in many ways. Certain constitutions are far more predisposed than others to receive this bacillus, especially under conditions of life unfavourable to robust health, when a nidus is formed for the development of the bacillus.

From other forms of tuberculosis the deaths in 1900 were 175, or 2·29 per 10,000 of population. Thus a large addition has to be made to the deaths from phthisis to appreciate the full mischief done by tubercular disease.

Deaths from all Tubercular Diseases.

The mortality from all forms of tubercular disease, taken together, has been at the average rate of about 10½ persons per 10,000 living for the last ten years. This rate is far lower than that which obtained in England during the year 1897, when the proportion was 19·30 per 10,000 living.

A table is supplied showing the results for each of ten years in New Zealand. Besides the death-rate from tubercular diseases, it also shows the percentage of deaths by tubercle to those from all causes, which was from 10 to 11½ per cent. for the decennial period 1891–1900.

DECENNIAL TABLE, 1891–1900, SHOWING THE DEATH RATE FROM TUBERCLE PER 10,000 LIVING AND PERCENTAGE OF TOTAL DEATHS.

Year.	Mean Population.	Number of Deaths from Tubercular Diseases.	Rate per 10,000.	Percentage of Total Deaths from all Causes.
1891	629,783	663	10·53	10·17
1892	642,245	700	10·90	10·84
1893	661,349	729	11·02	10·77
1894	679,196	752	11·07	10·87
1895	692,417	761	10·99	11·09
1896	706,846	680	9·62	10·57
1897	721,609	763	10·57	11·57
1898	736,260	769	10·44	10·62
1899	749,984	795	10·60	10·35
1900	763,594	752	9·85	10·44

DECENNIAL TABLE, 1891–1900. — Deaths from various Tubercular Diseases registered in New Zealand, specifying the Number under and over Five Years of Age.

Persons.

Year.	Tabes Mesenterica, Tubercular Peritonitis.		Tubercular Meningitis, Acute Hydrocephalus		Phthisis.		Other Forms of Tuberculosis, Scrofula.		Total Deaths from Tuberculosis.		Total All Ages.
	Under 5 Years.	Over 5 Years.	Under 5 Years.	Over 5 Years.	Under 5 Years.	Over 5 Years	Under 5 Years.	Over 5 Years.	Under 5 Years.	Over 5 Years.	
1891 ..	42	10	38	35	11	484	16	27	107	556	663
1892 ..	47	18	33	32	8	516	16	30	104	596	700
1893 ..	35	14	33	39	8	537	21	42	97	632	729
1894 ..	36	13	33	30	7	569	16	48	92	660	752
1895 ..	47	15	25	37	5	548	28	56	105	656	761
1896 ..	36	11	30	28	5	518	19	33	90	590	680
1897 ..	35	9	33	32	7	589	13	45	88	675	763
1898 ..	37	12	37	38	10	587	11	37	95	674	769
1899 ..	43	19	32	40	10	583	12	56	97	698	795
1900 ..	20	20	24	55	13	564	9	47	66	686	752

It will be seen that the term "tubercular diseases" includes "phthisis," "tabes mesenterica," "tubercular peritonitis," "tubercular meningitis," "acute hydrocephalus," with other forms of tuberculosis (scrofula, &c.). Of these the mortality from phthisis forms by far the greatest part of the whole. Thus, in 1900, there were 577 deaths from phthisis out of a total of 752 deaths from all tubercular complaints. Of 577 deaths by phthisis, only 13 were of persons under five years of age.

Examination of the next table, giving the full series of ages of persons who died from tubercular disease during the year 1900, shows that of 40 deaths from tabes mesenterica, with tubercular peritonitis, 20 were of children under 5 years. Also, that of 79 deaths from tubercular meningitis, with acute hydrocephalus, 24 were of persons under 5 years, and 33 from 5 to 20 years. Under "other forms of tuberculosis" (excepting phthisis) the greater numbers of deaths are at the earlier ages.

The mortality from phthisis is heaviest at 20–30 years, being 194 deaths out of 577 of all ages; but large numbers are found in the columns as far as that for the advanced term of 65 to 70 years, at which the deaths for 1900 were 22.

TABLE showing the Number of Deaths from Tubercular Diseases registered in New Zealand during the Year 1900, arranged in Groups of Ages.

Persons.

—	Under 1 Year.	Under 5 Years.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and upwards.	Ages not specified.	Total, 5 Years and over.	All Ages.
Tabes Mesenterica, Tubercular Peritonitis	15	20	1	2	1	3	6	2	1	1	3	...	...	...	...	...	...	...	...	20	40
Tubercular Meningitis, Acute Hydrocephalus	11	24	15	8	10	5	3	5	1	3	1	3	...	1	...	...	...	...	...	55	79
Phthisis	6	13	7	17	51	95	99	61	59	35	27	33	22	20	22	9	4	3	...	564	577
Other forms of Tuberculosis, Scrofula	3	9	2	5	3	9	6	4	5	2	2	3	3	1	2	...	...	...	...	47	56
Totals ...	35	66	25	32	65	112	114	72	66	41	33	39	25	22	24	9	4	3	...	686	752

To show the mortality from tuberculosis in various parts of the colony, a table giving the deaths in the various provincial districts is added, which, however, only shows that the mortality is distributed very much according to population. The deaths in the North Island are, however, found to be 62 fewer than those for the South Island, or 345 deaths and 407 deaths for those divisions respectively:—

TABLE showing the Number of Deaths from Tubercular Disease registered in each Provincial District of New Zealand during the Year 1900.

Provincial District.	Tabes Mesenterica, Tubercular Peritonitis.	Tubercular Meningitis, Acute Hydrocephalus.	Phthisis.	Other Forms of Tuberculosis, Scrofula	Total Deaths from Tuberculosis.
Auckland ..	7	11	131	8	157
Taranaki ..	2	3	16	1	22
Hawke's Bay	2	2	27	5	36
Wellington ..	6	7	108	9	130
Marlborough	..	1	4	..	5
Nelson ..	1	3	21	4	29
Westland ..	3	2	9	..	14
Canterbury ..	7	15	108	14	144
Otago ..	12	35	153	15	215
Totals ..	40	79	577	56	752

Eight deaths from "lupus" have not been included in the comparative table for ten years. All these were deaths of adult persons; one of them took place in the year 1900.

The report of the Royal Commission, presented to the Imperial

Parliament and dated 4th April, 1898, states that inquiry was made as to what administrative procedures are available and desirable for controlling the danger to man through using as food the meat and milk of tuberculous animals. Nothing was adduced to raise any doubt as to the accuracy of the opinion expressed at a previous Commission in 1895, that tubercular disease in bovine and other animals is identical with that in the human subject, and communicable from one to the other, nor doubt that any person who takes tuberculous matter into the body as food incurs risk of acquiring tuberculous disease. But the conclusion arrived at was that there has been a tendency to exaggerate the extent of the risk arising from meat. Dealing with the question of milk-supply, the Commissioners say :—

Whatever degree of danger may be incurred by the consumption of the flesh of tuberculous animals, there can be little doubt that the corresponding danger in respect of milk-supply is a far greater one. On this point the opinion of the previous Royal Commission on tuberculosis was emphatic: "No doubt the largest part of the tuberculosis which man obtains through his food is by means of milk containing tuberculous matter." In Great Britain and Ireland meat, as a rule, is cooked before it is eaten to an extent which goes largely to destroy infective matter. Milk, on the other hand, is largely consumed in a raw state, especially by children, and there exists a general distaste for cooked milk as a beverage. Amongst most continental nations the practice is to some extent the opposite of this, and large quantities of meat, especially in the various forms of sausages, are consumed absolutely raw, while the greater proportion of the milk is cooked before consumption. It has been proved over and over again that milk from tuberculous udders, and even milk which has been purposely contaminated with tuberculous matter, can be rendered perfectly harmless by being boiled for one minute—a method of sterilisation which we agree with the former Commission in preferring for general application to any of the other plans which have been employed. We have already explained how unsatisfactory is the system of meat inspection in this country; but as regards milk, in relation to tuberculosis, inspection is still more so; indeed, it may be said not to exist. Even local authorities, who exert themselves to prevent the sale of tuberculous meat, are without sufficient powers to prevent the sale within their districts of milk drawn from diseased cows.

Legislative action has been recommended to safeguard the life and health of the people from tubercle; and the complete isolation of consumptive patients, with the disinfecting of their sputa, and of everything that has been in contact with them, is suggested from time to time as a necessary measure.

Cancer.

The deaths from cancer during the year 1900 were 430. There were more deaths of males than of females, the numbers being, males 246, females, 184. The rate of mortality per 10,000 living was 5·63. The apparent increase in deaths from this disease is shown further on and compared with that of England. But the increase is not believed by all authorities to be a fact to the extent represented, but partly the result of more careful certification of the causes of death, and of improved diagnosis in cases of what is termed inaccessible cancer.

It is certain, however, that out of a total of 7,200 deaths from

all causes in New Zealand during 1900, 430, or 5·97 per cent., were caused by cancer.

The death-rate from cancer is not so great as that from tubercular diseases, but is nevertheless a most alarming matter, not only on account of the number of deaths, but because of its progressive increase. "A decennial table shows that the deaths per 10,000 persons living rose from 4·68 in 1891 to 5·63 in 1900; and that whereas 4·53 out of every 100 deaths were attributable to cancer ten years ago, the proportion had grown to 5·97 last year.

TABLE showing for each of the Ten Years, 1891 to 1900, the Number of Persons registered as having Died from Cancer, the Proportion of Deaths from Cancer per 10,000 Living, and the Percentage of all Deaths attributed to Cancer.

Year.	Estimated Mean Population.	Deaths from Cancer.	Total Deaths all Causes.	Deaths from Cancer per 10,000.	Percentage of Total Deaths due to Cancer.
1891 ..	629,783	295	6,518	4·68	4·53
1892 ..	642,245	307	6,459	4·78	4·75
1893 ..	661,349	332	6,767	5·02	4·91
1894 ..	679,196	408	6,918	6·01	5·90
1895 ..	692,417	383	6,863	5·53	5·58
1896 ..	706,846	389	6,432	5·50	6·05
1897 ..	721,609	395	6,595	5·47	5·99
1898 ..	736,260	471	7,244	6·40	6·50
1899 ..	749,984	468	7,680	6·24	6·09
1900 ..	763,594	430	7,200	5·63	5·97

To exhibit how cancer affects the different parts of the human body in respect of each sex, the experience of five years (1896–98 1899 and 1900) is shown in a succeeding table. Of any single organ affected, the stomach is the one most liable to be the seat of cancer among males, although with this sex the disease is apparently to about the same extent located in the mouth, lips, tongue, and throat, taking these parts all together. Next to the stomach, the liver is with males the part which is most often attacked, to judge by mortality records, and next in order come the intestines and rectum. Afterwards, but at a considerable distance, follow the kidneys, bladder, and urethra.

Amongst the females, the organs of generation, ovaries, uterus, and vagina, as a group, show by far most cases of mortality from cancer; but, as with the males, the stomach is, of any single organ, the one most affected, the liver coming next, then the breast, and then the intestines and rectum. Females do not contract cancer in the mouth (judging by the returns of deaths), tongue, lips, and throat, to nearly the same extent as prevails among males. Whatever may be the cause, the figures are remarkable, being only 6 out of every 100 deaths from cancer among females, against 31 out of every 100 of males dying from the same cause, or, expressed in numbers, 48 deaths of females occurred against 336 of males, from cancer in the mouth, &c., in a five years' experience of mortality.

Deaths from Cancer, 1896–98, 1899, and 1900.

Table showing the Number of Deaths of Males and Females from Cancer during the Five Years 1896–98, 1899, and 1900, classified according to the part of the Body affected.

Part Affected.	1896-98.		1899.		1900.	
	Number of Deaths.	Proportion of Specified.	Number of Deaths.	Proportion of Specified.	Number of Deaths.	Proportion of Specified.
	Males.					
		Per Cent.		Per Cent.		Per Cent.
Mouth, lip, tongue, throat, neck, &c. ..	203	32·85	65	27·43	68	31·78
Stomach	181	29·29	87	36·71	80	37·38
Intestines, rectum ..	72	11·65	20	8·44	26	12·15
Liver	102	16·50	40	16·88	25	11·68
Kidneys, bladder, urethra, &c. ..	28	4·53	17	7·17	9	4·21
Leg, foot, &c. ..	14	2·27	6	2·53	4	1·87
Lung	10	1·62	2	0·84	2	0·93
Arm, hand, chest, spine, shoulder ..	8	1·29	..	..	..	..
	618	100·00	237	100·00	214	100·00
Not specified ..	60	..	34	..	32	..
Total ..	678	..	271	..	246	..
	Females.					
Mouth, tongue, throat, &c. ..	25	4·89	17	9·71	6	3·73
Breast	70	13·70	20	11·43	17	10·56
Stomach	106	20·74	40	22·86	28	17·39
Intestines, rectum ..	57	11·16	14	8·00	21	13·04
Kidneys, bladder ..	6	1·17	4	2·29	5	3·11
Ovary, uterus, vagina	143	27·98	50	28·57	54	33·54
Liver	82	16·05	25	14·29	25	15·53
Gall-bladder, spleen, pancreas ..	9	1·76	3	1·71	2	1·24
Lung, spine, thigh, shoulder ..	13	2·55	2	1·14	3	1·86
	511	100·00	175	100·00	161	100·00
Not specified ..	66	..	22	..	23	..
Total ..	577	..	197	..	184	..

Considering the numbers of persons dying at the different age-periods, the following table of ten years' results shows the age of 30 years to be the time of life at which deaths from cancer begin to be numerous (it is really 35 for males and 30 for females). The maximum of deaths is reached at the period 60 to 65 for males, and 55 to 60 for females. These remarks are given without reference to the numbers of persons living at the various ages.

Deaths from cancer, it will be observed, are very rare among children under 5 years, and not frequent in those above that age.

TABLE showing the Number of Persons (Males and Females) at Different Ages registered as having Died from Cancer in New Zealand during the Ten Years, 1891 to 1900.

Year.	Under 1 Year.				Total under 1 Year.	1 to 2.	2 to 3.	3 to 4.	4 to 5.	Total under 5 Years.	5 to 10.	10 to 15.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and upwards.	Ages not specified.	Total 5 Years and over.	All Ages.
	Under 1 Month.	1 to 3 Months.	3 to 6 Months.	6 to 12 Months.																									
1891... ...	...	...	1	...	1	1	1	...	1	4	...	...	2	3	3	4	15	22	27	52	42	40	41	25	12	3	...	291	295
1892... ...	...	...	...	...	...	...	...	2	...	2	2	1	2	3	3	7	15	19	27	52	53	45	40	21	11	4	...	305	307
1893... ...	...	...	...	...	...	...	...	2	1	3	1	3	...	3	1	6	9	22	32	61	51	57	36	25	13	6	...	320	332
1894... ...	...	...	...	...	...	...	...	1	...	1	1	...	3	1	5	11	15	27	41	64	73	71	38	26	24	7	...	407	408
1895... ...	...	...	...	...	...	...	...	...	...	...	2	...	.	3	1	6	11	25	47	61	64	63	38	37	19	6	...	383	383
1896... ...	...	...	...	...	...	...	...	...	2	2	2	1	1	2	5	6	14	21	36	59	74	67	49	29	14	7	...	387	389
1897... ...	...	1	...	...	1	...	1	...	1	3	...	2	1	1	...	7	10	22	41	42	71	74	49	35	29	8	...	392	395
1898	...	...	...	...	...	...	...	2	...	2	1	2	2	5	5	8	17	36	47	47	77	79	69	35	30	9	...	469	471
1899... ...	...	...	...	...	...	...	...	1	...	1	3	3	...	1	4	6	15	21	42	48	82	64	87	45	27	19	...	467	468
1900... ...	...	1	...	...	1	...	...	1	...	2	...	...	6	2	2	6	7	16	40	35	75	78	59	51	31	20	...	428	430

The numbers of deaths of persons from cancer in each provincial district are given in another table, according to age groups, but the result merely shows the disease to be one found everywhere throughout the colony. At least there is no sufficient evidence of climatic conditions affecting the mortality to a great extent in any particular part of the country.

TABLE showing the Number of Deaths from Cancer at Various Ages Registered in each Provincial District of the Colony of New Zealand during the Year 1900.

Provincial Districts.	Ages.																
	Under 5.	5 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 and upwards.	Not stated.	Total.
Auckland	1	2	...	...	1	2	5	7	8	26	19	17	10	7	3	...	108
Taranaki	...	...	...	...	...	...	...	1	1	2	2	2	...	1	...	...	9
Hawke's Bay	...	...	...	...	...	...	1	3	...	2	5	2	...	...	2	...	15
Wellington...	...	1	1	1	3	2	6	12	3	6	12	10	10	6	6	...	79
Marlborough	...	...	...	...	...	...	...	2	1	2	3	...	2	1	...	...	11
Nelson	...	...	...	1	...	1	1	1	1	3	4	1	...	3	3	...	19
Westland	...	1	...	...	...	...	...	...	...	1	1	3	4	...	1	...	11
Canterbury	...	1	1	...	2	2	1	7	9	18	14	11	5	5	3	...	74
Otago	1	1	...	...	...	...	3	7	12	20	18	13	20	8	2	...	104
Totals	2	6	2	2	6	7	16	40	35	75	78	59	51	31	20	...	430

The increase since 1881 is well exhibited in respect of each sex, and in regard to the higher ages, which are the periods at which the most cancer deaths occur, by a proportional statement:—

PROPORTIONS OF DEATHS FROM CANCER PER 10,000 MALES AND FEMALES LIVING AT THREE AGE-PERIODS.

Year.	40 to 50. Males.	40 to 50. Females.	50 to 60. Males.	50 to 60. Females.	60 to 70. Males.	60 to 70. Females.
1881 ..	5·58	9·80	11·10	22·57	22·86	43·78
1898 ..	9·07	16·59	21·64	26·09	55·21	47·44

The death-rates for cancer in respect of each sex are given for each of six years, selected to show the position as from 1886 to 1900:—

DEATHS FROM CANCER IN EVERY 10,000 PERSONS OF EACH SEX LIVING IN NEW ZEALAND.

Year.	Males.	Females.	Year.	Males.	Females
1886 ..	3·69	3·67	1898 ..	6·77	5·98
1890 ..	4·72	4·79	1899 ..	6·85	5·56
1894 ..	6·65	5·27	1900 ..	6·12	5·09

Here the mortality is higher among the males than among the females, which is the reverse of English experience, where the rate was 6·36 per 10,000 of males and 9·29 of females, for the year 1897. In the United Kingdom, however, the rate of increase is so much higher among males than with females that the Registrar General calculates equilibrium will be reached in about the year 1932, and thereafter the rate among males would exceed the rate among females. The English rate for 1897 is the highest recorded there for each of the two sexes.

The increase in the numbers for the sexes together for England and New Zealand is represented in the proportions below:—

DEATHS FROM CANCER IN EVERY 10,000 PERSONS LIVING.

Year.	New Zealand.	England.
1881 ..	2 69	5·20
1886 ..	3·68	5·90
1891 ..	4·68	6·92
1896 ..	5·50	7·64

The actual number of deaths of persons of either sex and all ages registered in New Zealand during the last ten years was:—

	Males.	Females.	Totals.
1891	154	141	295
1892	173	134	307
1893	188	144	332
1894	240	168	408
1895	208	175	383
1896	205	184	389
1897	210	185	395
1898	263	208	471
1899	271	197	468
1900	246	184	430
Totals	2,158	1,720	3,878

Mortality from Developmental Diseases.

The total of deaths from developmental diseases was 699, or 9·15 per 10,000 persons living. The mortality from premature birth comprised 276 deaths, and that from atelectasis, cyanosis, and other congenital defects 55 deaths. The proportion of deaths from premature birth varies from 10 to 14 out of every 1,000 births, and that from congenital defects from 2 to 4 per 1,000 births. Particulars for six years exhibit the annual rates :—

Number and Proportions per 1,000 Births.

Year.	Deaths from Premature Birth. No.	Deaths from Premature Birth. Proportion per 1,000.	Deaths from Congenital Defects. No.	Deaths from Congenital Defects. Proportion per 1,000.
1895	183	9·87	78	4·21
1896	230	12·36	46	2·47
1897	211	11·26	52	2·78
1898	251	13·24	54	2·85
1899	261	13·86	47	2·50
1900	276	14·12	55	2·81

Stating the result in another way, there was one death from premature birth to every 71 births in 1900, and one death from congenital defect to every 355 births. In England the proportion of deaths from premature birth to every 1,000 births was as high as 18·98 in the year 1895.

Old Age.

Deaths from old age in 1900 numbered 368, against 415 in 1899.

Mortality from Local Diseases.

Deaths by diseases of the nervous system were 760, or 10·57 out of every 100 deaths from all causes, and 9·95 out of every 10,000 persons living. Of the 760 deaths, 230 were credited to apoplexy, 137 to convulsions, and 93 to inflammation of the brain and its membranes. Paralysis, including hemiplegia and paralysis of the insane, caused 140 deaths, and locomotor ataxia 6 deaths. Paraplegia, with diseases of the spinal cord, caused 16. Deaths from nervous diseases (excluding convulsions of children) numbered 623, or 8·16 per 10,000 persons living.

Diseases of the circulatory system resulted in 848 deaths, being 11·78 out of every 100 from all causes, and 11·11 per 10,000 persons living. Of the total number in this order, endocarditis and valvular disease of the heart contributed 561 deaths. From angina pectoris there were 27 deaths, from syncope 122, from aneurism, 31; and from other forms of heart disease (hypertrophy, fatty degeneration, and pericarditis) 68.

Diseases of the respiratory system show 802 deaths, of which 620 were attributable to bronchitis and pneumonia. Taken together, these two complaints were the cause of more deaths than was phthisis, and adding 45 from pleurisy, 28 from croup, 16 from laryngitis, and 93 from other respiratory diseases, the mortality in the order is found to be 11·14 per cent. of the total deaths, and 10·50 per 10,000 of the population.

Deaths from diseases of the digestive system also formed a large proportion of the whole (8·98 per cent.), the number being 647. Enteritis was most fatal, showing 179 deaths, and gastritis 82, liver diseases coming next with 112 deaths.

Of 287 deaths from diseases of the urinary system in 1900, the deaths from Bright's disease of the kidneys (albuminuria) numbered 151.

Violent Deaths.

Deaths by violence form a large item in the total mortality. In 1900 the proportion per 10,000 of persons living was 7·53, the total number of deaths having been 575.

Of 469 males who died violent deaths, 57 were suicides. The deaths of females by violence were far fewer than those of males, amounting to 106, and out of these only 11 committed suicide. A table given previously states the full list of deaths from external or violent causes for the year 1900.

Accidental deaths numbered 496, males 405 and females 91. Of the total male deaths, 200 resulted from fractures or contusions, and 121 from drowning. Of the female deaths, 12 were due to drowning.

Number of Medical Men.

At the time of the census, April, 1896, there were in the colony 411 medical men stated to be in practice, against 362 returned in 1891. (The number of medical practitioners registered in the colony is 711, including 43 whose addresses are not known and 143 who have left New Zealand.) Medical students numbered 48. There were 82 persons who are grouped in the detailed tables of the census as irregular medical practitioners, including, among others, 5 Chinese doctors, 31 herbalists and 11 assistants, and 11 medical galvanists.

Hospitals, Lunatic Asylums, Benevolent Asylums, and Charitable Institutions.

Hospitals.

Prior to the abolition of provinces the hospitals of the colony were supported mainly out of provincial revenues. After that event the expenditure for hospitals was for the most part charged against the revenue of counties and municipal corporations, until October, 1885, when "The Hospitals and Charitable Institutions Act, 1885," came into force.

The portion of the colony included within the three principal islands—the North, Middle, and Stewart Islands—was by the above Act divided into twenty-eight hospital districts, each consisting of one or more counties with the interior boroughs, to be presided over by elective Boards, designated "Hospital and Charitable Aid Boards."

The revenues of these Boards accrue from the following sources:—

(1.) Rents and profits of land and endowments vested in the Board, or set apart for the benefit of particular institutions;
(2.) Voluntary contributions;
(3.) Grants from contributory local authorities; and
(4.) Subsidies from the Consolidated Fund (these being at the rate of 10s. for every £1 of bequests, but in no case exceeding £500 in respect of any one bequest; £1 4s. for every £1 of voluntary contributions; and £1 for every £1 received from any local authority).

The contributory local authorities (being the County and Borough Councils, and Boards of road and town districts where the Counties Act is not in force) are empowered by the Act to raise by special rates the amounts assessed by the Hospital District Boards as their proportionate contributions to the Hospital and Charitable-aid Fund.

The District Boards undertake the general management and control of those hospitals that are not incorporated in terms of the Act, and are required to contribute to the support of the incorporated hospitals. To be incorporated a hospital must have as many as 100 subscribers, contributing not less than £100 annually by amounts of not less than 5s., and must have been declared by the Governor in Council, after receipt by him of a duly signed petition, to be a body politic and corporate, under the government of trustees.

There are 43 hospitals in the colony, of which 22 are incorporated institutions, while 21 are directly managed and controlled by District Boards. In 1900 these hospitals afforded accommodation for 1,119 male and 626 female patients, a total of 1,745. The number of cubic feet of space included within the walls of all the sleeping-wards was 2,461,255, which gave an average of 1,410 cubic feet to each bed. 7,474 males and 3,694 females were admitted as patients during the year 1900, and 710 male and 301 female patients were inmates at the end of the year. The total number of indoor patients during the year was 12,202—viz., 8,239 males and 3,963 females.

Outdoor relief was also given to a very large number of persons; but, as in some of the hospitals no records are kept of the outdoor patients, it is impossible to state the number of distinct persons who received such relief.

The total revenues of the various hospitals as at five different annual periods were:—

—	1891-92.	1894-95.	1897-98.	1898-99.	1899-1900.
	£	£	£	£	£
Voluntary contributions and bequests	8,229	7,915	11,521	11,991	9,188
Payments by patients	9,318	10,228	12,728	13,066	16,503
From Government	30,659	36,373	38,687	41,052	44,815
From Hospital Boards and local authorities	23,560	27,758	31,524	33,864	35,006
Rents and other sources ..	4,128	5,522	5,429	5,523	5,097
Totals	75,894	87,796	99,889	105,496	110,609

Benevolent Asylums and Charitable Institutions.

The various benevolent asylums and charitable institutions are placed on a similar footing to the hospitals. Most of the Boards of hospital districts are also Charitable-aid Boards; but, for the purpose of distributing charitable aid only, some of the hospital districts have been united into larger districts, so that, although there are thirty Boards for hospital purposes, there are only twenty-three for charitable-aid purposes.

Returns were received from nineteen benevolent asylums (not including orphanages), established for the support of indigent persons. The number of inmates in these institutions at the end of 1900 was 1,151, of whom 684 were males and 467 females. Out-door relief was given by three of these institutions to 1,846 persons (including 1,047 children).

Auckland Sailors' Home.

There is a Sailors' Home at Auckland for the use of seafaring men resident in or visiting the town. The late Edmund Costley having left a large sum for charitable purposes, it was resolved to employ the bequest in building and endowing an institution where sailors might be received without distinction of race or religious belief, and board, lodging, and refreshments provided for them, together with such instruction and amusements as might tend to promote their social comfort and general welfare.

The Home, built in 1887, has room for 35 inmates, who are charged 15s. a week for board and lodging. It is managed by a council of eight members elected by the subscribers to the institution, with the Primate of New Zealand (the Right Rev. W. G. Cowie), who first originated the scheme, as Life President.

Orphan Asylums.

There were in 1900 four orphan asylums in the colony, one maintained by a District Hospital Board, one by the Church of England authorities, and two by clergy of the Roman Catholic Church; three of them receiving, at the charge of the State, orphan, destitute, and other children committed to them by a Stipendiary Magistrate.

Exclusive of the children so committed, 15 male and 29 female orphans were received during the year 1900, and 50 male and 77 female orphans remained as inmates at the end of the year.

Orphanages receiving committed children are, for that purpose, constituted "industrial schools."

Lunatic Asylums.

There are seven public lunatic asylums in the colony, maintained wholly or in part out of the public revenue. There is also one private asylum, licensed by the Governor for the reception of lunatics.

The amount of sleeping-accommodation provided in each of the public asylums is shown in tabular form, giving separately the number and cubic contents of the sleeping-rooms intended for one person only, and of the dormitories occupied by several inmates conjointly, together with the number of patients actually in the asylums on the 31st December, 1900:—

—	Sleeping-rooms for One Person only.			Dormitories for more than One Person.		
	Number.	Aggregate Number of Cubic Feet.	Inmates (Patients) on 31st December, 1900.	Number.	Aggregate Number of Cubic Feet.	Inmates (Patients) on 31st December 1900.
Auckland ..	122	112,508	122	24	219,122	362
Wellington ..	74	70,605	74	16	100,173	193
Porirua ..	39	36,443	39	12	282,747	419
Nelson ..	30	26,596	30	14	60,019	107
Hokitika ..	31	23,223	31	8	69,302	90
Christchurch	80	69,651	80	34	227,010	432
Seacliff ..	153	119,334	153	42	265,602	470
Totals ..	529	458,360	529	150	1,223,975	2,073

At Ashburn Hall, Waikari, there are 66 rooms, each for one person only, with an aggregate cubic content of 64,913 ft. The number of inmates on the 31st December, 1900, was 47.

At the end of 1900, 1,581 male and 1,091 female patients were under the care of the asylum officers of the colony. Of these, 1,491 males and 998 females were regarded as incurable, 8 males and 16 females were out on trial, and 82 males and 77 females were supposed to be curable. 160 male and 171 female patients were discharged during the year.

The following shows the proportion of insane—or, rather, of inmates of lunatic asylums and those out on trial—to the population (exclusive in each case of Maoris) at the end of the years stated:—

1884,	1 insane person	to every	393 of population.
1886,	"	"	370 "
1888,	"	"	365 "
1890,	"	"	348 "
1892,	"	"	339 "
1894,	"	"	316 "
1896,	"	"	308 "
1898,	"	"	300 "
1899,	"	"	296 "
1900,	"	"	288 "

It must not be overlooked that the proportions are increased by the admission into the asylums of inebriates, idiots, and others, who should not properly be there.

The Inspector of Hospitals and Asylums, in his report for the year 1900, specifies the causes of insanity in 458 cases (males, 270; females, 188) out of a total of 598 (335 males and 263 females)

admitted during that year. In 99 of these (46 males, 53 females) the cause is given as "congenital or hereditary," and in 75 (males, 57; females, 18) as "drink." The proportion of cases due to drink to the total number of specified causes was therefore 16·38 per cent. against a similar proportion of 14·36 in the year 1899.

The proportion of the insane to population in New Zealand for the year 1896 was found to be lower than that which obtained in Victoria, which is more populous than this colony. But the percentage here exceeded that for the other colonies of the Australasian group, where, with the exception of New South Wales, the population is less than in New Zealand.

The figures for 1896 (Coghlan's accepted) are:—

INSANITY PER 10,000 OF POPULATION IN AUSTRALASIAN COLONIES.

Victoria	35·8	South Australia	25·9
New Zealand	32·4	Tasmania	21·8
Queensland	31·0	Western Australia (hospitals only)	13·4
New South Wales	29·6		

Comparing certain European countries, Canada, and the United States of America, the rates of insanity show:—

INSANITY PER 10,000 OF POPULATION IN EUROPE AND AMERICA.

England and Wales	31·4	United States	32·3
Scotland	32·7	Germany	22·8
Ireland	45·1	Austria	21·7
Canada	27·4	Switzerland	11·0

DEAF, DUMB, AND BLIND.

Particulars relating to the deaf, dumb, and blind, as ascertained at the census taken in 1896, are referred to in the Year-book of 1899 (pages 134–137).

SECTION XIII.—REPRESENTATION, AND THE GENERAL ELECTION OF 1899.

Representation.

On the basis of the results of the census of 1896 the colony is divided in accordance with the Representation Act Amendment Acts, 1887 and 1889, into sixty-two districts for purposes of European representation—fifty-eight rural districts having one member each, and four city electorates three members each. The Act of 1889 directed that in computing for electoral purposes the population of the colony 28 per cent. shall be added to the country population—*i.e.*, all persons living outside towns of 2,000 inhabitants and over. The total population of the colony (other than Maoris), with the addition aforesaid, having been ascertained, was then divided by the number of members (70), and the quotient thus obtained formed the quota. The four city electoral districts (which have three members each) are so defined in extent that the population shall be three times the quota. Inasmuch as it would be impossible to divide the country into a given number of districts all having exactly the precise quota of population, the law permitted the Commissioners to make an allowance of 750 persons by way of addition to or deduction from the population of rural districts, and of 100 in case of city electorates, with special provision for districts where the population is partly city and partly rural.

But, although the above describes the existing state of affairs, "The Representation Act, 1900," provides that when the present General Assembly expires by effluxion of time, or other sooner determination, the number of members to be thereafter elected to the House of Representatives shall be seventy-six, instead of seventy, and for six new districts, one for each additional member. It also increases the allowance of 750 persons within or outside the quota to 1,250 persons in the formation of rural districts. Thus, more consideration can be given to community of interest, facilities of communication, and topographical features, in constructing the districts.

"The Representation Act Amendment Act, 1896," provides for two permanent Commissions, called the "North" and "Middle" Island Representation Commissions. These sit together as a joint Commission for the purpose of fixing the number of districts for the North and Middle Islands respectively, but afterwards act separately and independently of one another, the duties and functions of each being confined to their respective island.

The North Island with its adjacent islands includes at the present time 30 electoral districts, having 34 members; the Middle and Stewart Islands having 32 districts and 36 members. In 1893 the North Island returned 31 and the Middle Island 39 members.

But movement of population between 1891 and 1896 has resulted in the addition of three members to the North, and a corresponding reduction in the Middle Island.

These districts are, as above stated, for purposes of European representation. But the colony is again divided into four districts for purposes of Maori representation, under the electoral law, each district having one Native member elected by the Maoris; making the House of Representatives consist of 74 members altogether—70 Europeans and 4 Maoris. After the next general election the number will be 80 members in full.

The Electoral Acts.

By the principal Act, which came into force in 1893, the great step was taken of admitting women to the franchise. The Amendment Act of 1896 abolished the non-residential or property qualification, with a saving clause in favour of then-existing registrations in respect of such qualification.

[Electors are enrolled on sending to the Registrar a claim and declaration according to a prescribed form. There are no fixed periods for making up fresh electoral rolls, but the rolls are revised and printed before a general election, and also for any district in which a bye-election is to take place. Nor are there any fixed periods for the revising and purifying of the rolls. It is the duty of the Registrar of each electoral district to keep the rolls revised and complete.]

The General Election of 1899.

For European Representatives.

(Polling-day, 6th December, 1899. Number of Polling-places, 1,682.)

Dealing with the population of both sexes, it is found that the total number of persons on the rolls was 373,744, out of a total adult population estimated at 386,146. These results give a proportion of 96·79 per cent. of adults who were registered as electors, as against 95·11 at the previous election in 1896, and 94·98 in 1893. The number of persons who voted was 279,330, or 77·59 per cent. of the number on the rolls, a slightly higher proportion than obtained in 1896, which was 76·13 per cent.

Date of General Election.	Estimated Total Adult Persons.	Number on Rolls.	Proportion of Adult Persons registered as Electors.	Number of Persons who voted.	Proportion of Persons on Rolls who voted.
1893	319,010	302,997	94·98	220,082	75·25*
1896	356,658	339,230	95·11	258,254	76·13
1899	386,146	373,744	96·79	279,330	77·59*

Dealing with men only, the number on the rolls was 210,529, or only 4,244 short of the full number of adult males in the colony as estimated for the day of the election. The males who voted in 1899 were 159,780, or 79·06 per cent. of those on the rolls, against 75·90 per cent. in 1896.

Date of General Election.	Estimated Total Adult Males.	Number on Rolls.	Proportion of Adult Males registered as Electors.	Number who voted.	Proportion of Males on Rolls who voted.
1893	179,539	193,536	†	129,792	69·61*
1896	197,002	196,925	99·96	149,471	75·90
1899	214,773	210,529	98·02	159,780	79·06*

* Excluding figures for three electorates in which there was no contest.
† The number on rolls was in excess of the estimated adult male population at the date of the election.

The figures relating to women show that a larger proportion (95·24 per cent.) of adults were registered as electors in 1899 than in 1896 (89·13 per cent.), which would indicate an increasing disposition to use the franchise. But the number of women who voted, 119,550, is 75·70 per cent. of the females on the rolls, while in 1896 there were 108,783 who voted, giving the higher proportion of 76·44 per cent.; so that (assuming the figures to be correct) there is no evidence of a greater willingness now on the part of the females to go to the poll.

Date of General Election.	Estimated Total Adult Females.	Number on Rolls.	Proportion of Adult Females registered as Electors.	Number who voted.	Proportion of Females on Rolls who voted.
1893	139,471	109,461	78·48	90,290	85·18*
1896	159,656	142,305	89·13	108,783	76·44
1899	171,373	163,215	95·24	119,550	75·70*

* Excluding figures for three electorates in which there was no contest.

The following table shows for the different districts the number of electors of each sex on the rolls, with the voters, and the estimated population:—

District.	Number of Members.	Population, 1896 (of Districts proclaimed in September of that Year).	Electors on Roll.		Number of Voters who recorded Votes.	
			Males.	Females.	Males.	Females.
Bay of Islands ..	1	9,841	3,745	1,794	2,657	1,280
Marsden	1	9,661	3,686	1,855	2,397	1,314
Waitemata	1	9,404	3,160	1,716	2,134	1,206
Eden	1	10,469	2,866	2,672	2,397	2,109
City of Auckland ..	3	35,539	9,355	8,981	7,102	6,517
Parnell	1	10,741	2,824	3,255	2,177	2,355
Manukau	1	10,444	2,747	2,591	2,066	1,846
Franklin	1	10,005	2,655	2,141	2,166	1,570
Thames	1	10,079	3,756	2,480	2,729	1,950
Ohinemuri	1	9,467	5,332	2,541	3,679	1,847
Waikato	1	9,894	3,167	2,115	2,517	1,835

District.	Number of Members.	Population, 1896 (of Districts proclaimed in September of that Year).	Electors on Roll.		Number of Voters who recorded Votes.	
			Males.	Females.	Males.	Females.
Bay of Plenty ..	1	9,405	2,820	1,966	2,353	1,609
Waiapu	1	9,411	3,855	2,251	3,249	1,828
Hawke's Bay ..	1	9,582	2,991	1,878	*	*
Napier	1	11,275	2,524	2,407	2,052	1,898
Waipawa	1	8,623	3,054	1,852	2,582	1,525
Pahiatua	1	8,517	2,795	1,706	2,345	1,402
Masterton	1	9,504	3,077	2,095	2,423	1,568
Wairarapa	1	8,549	2,874	1,800	2,380	1,478
Egmont	1	9,391	3,356	1,969	2,854	1,384
Taranaki	1	10,586	3,030	2,649	2,584	2,099
Hawera	1	8,586	3,110	2,082	2,461	1,602
Patea	1	8,537	3,037	1,810	2,284	1,298
Wanganui	1	10,267	3,406	2,995	2,755	2,400
Rangitikei	1	9,439	3,569	2,040	2,534	1,182
Palmerston	1	10,198	2,988	2,362	2,282	1,801
Manawatu	1	8,604	2,752	1,750	2,153	1,163
Otaki	1	8,530	2,521	1,713	2,068	1,303
Suburbs of Wellington	1	10,567	3,179	2,947	2,450	2,110
City of Wellington ..	3	35,516	9,946	8,928	8,533	7,080
City of Nelson ..	1	10,727	2,572	2,796	2,235	2,286
Motueka	1	9,212	2,469	1,817	1,900	1,190
Wairau	1	10,391	3,222	2,256	2,507	1,692
Buller	1	9,606	3,637	2,225	3,209	1,931
Grey	1	9,880	3,582	2,141	2,828	1,706
Westland	1	9,337	2,829	1,598	*	*
Ashley	1	9,364	2,764	1,705	1,975	1,160
Kaiapoi	1	9,785	2,509	2,287	2,136	1,879
Avon	1	9,691	2,441	2,452	2,046	1,954
City of Christchurch ..	3	35,528	9,976	10,774	8,026	8,294
Lyttelton	1	10,639	2,516	2,325	1,966	1,621
Riccarton	1	8,974	2,432	2,153	2,004	1,729
Ellesmere	1	9,446	2,285	1,836	1,966	1,450
Selwyn	1	9,270	2,783	1,697	2,107	1,250
Ashburton	1	10,187	3,079	2,149	2,541	1,659
Geraldine	1	9,003	2,438	1,905	2,049	1,488
Timaru	1	10,156	2,628	2,390	2,161	1,818
Waitaki	1	9,527	2,778	1,751	2,209	1,169
Oamaru	1	10,148	2,610	2,271	2,024	1,722
Waihemo	1	9,746	2,620	1,810	*	*
Waikouaiti	1	9,443	2,171	2,086	1,699	1,467
City of Dunedin ..	3	35,000	9,646	10,438	7,786	7,775
Caversham	1	11,351	3,001	3,150	2,302	2,310
Taieri	1	9,480	2,496	2,025	1,952	1,442
Bruce	1	8,754	2,659	2,006	2,029	1,539
Tuapeka	1	9,290	2,944	1,776	2,210	1,243
Clutha	1	9,814	2,868	2,057	2,222	1,504
Mataura	1	9,767	3,101	2,085	2,416	1,689
Wakatipu	1	9,434	3,059	1,706	2,367	1,254
Wallace	1	9,270	3,007	1,571	2,356	1,217
Invercargill	1	10,757	2,844	2,960	2,358	2,282
Awarua	1	9,511	2,386	1,676	1,831	1,271

*Not contested.

Particulars are given for the four city electorates, where the electors have the right of voting for three members. The number of votes exercisable is nearly fourteen thousand in excess of those recorded, so that some of the electors evidently voted for only one or two candidates:—

City.	Number of Members returned.	Electors on the Rolls.			Voters who recorded Votes.			Number of Votes recorded.	Number of Votes exercisable by Persons who voted.
		Men.	Women.	Total.	Men.	Women.	Total.		
Auckland ..	3	9,355	8,981	18,336	7,102	6,517	13,619	38,676	40,857
Wellington ..	3	9,946	8,928	18,874	8,533	7,080	15,613	43,694	46,839
Christchurch ..	3	9,976	10,774	20,750	8,026	8,294	16,320	43,062	48,960
Dunedin ..	3	9,646	10,438	20,084	7,786	7,775	15,561	43,980	46,683
Total ..	12	38,923	39,121	78,044	31,447	29,666	61,113	169,412	183,339

A return is added showing the number of votes recorded for each candidate:—

Electoral Districts and Names of Candidates.	Number of Votes recorded.	
	For each Candidate.	Total.
Bay of Islands:		
Houston, R. M. ..	2,002	
McLeod, N. A. ..	1,935	3,937
Marsden:		
Thompson, R. ..	2,205	
Alderton, G. E. ..	891	
Mackesy, C. E. R. ..	615	3,711
Waitemata:		
Monk, R.	1,713	
Ford, E.	1,263	
Newman, C. ..	364	3,340
Eden:		
Bollard, J.	2,255	
Niccol, M.	2,251	4,506
City of Auckland:		
Napier, W. J. ..	6,097	
Fowlds, G.	5,595	
Crowther, W.* ..	4,751	
Holland, J. J. ..	4,657	
Hobbs, R.	4,647	
Baume, F. E. ..	3,792	
Rosser, A.	3,511	
Vaile, S.	2,456	
Regan, J.	1,470	
French, R.	1,366	
Quinlan, P.	334	38,676

Electoral Districts and Names of Candidates.	Number of Votes recorded.	
	For each Candidate.	Total.
Parnell:		
Lawry, F.	2,263	
Campbell, H. ..	1,423	
Allen, J. C.	846	4,532
Manukau:		
O'Rorke, Sir G. M. ..	1,967	
Taylor, J. E. ..	936	
Buckland, W. F. ..	516	
Hull, F.	493	3,912
Franklin:		
Massey, W. F. ..	2,458	
Wilson, W. Findlay ..	1,278	3,736
Thames:		
McGowan, J. ..	2,573	
Greenslade, H. J. ..	1,389	
Taylor, E. H. ..	717	4,679
Ohinemuri:		
Palmer, Jackson ..	1,765	
Moss, E. G. B. ..	1,470	
McCullough, W. ..	795	
Stewart, M. J. ..	762	
Deeble, W.	524	
De Bakker, L. ..	206	
Drumm, E. J. ..	4	5,526
Waikato:		
Lang, F. W. ..	2,337	
Hosking, J.	2,015	4,352

* Died, 14th March, 1900. J. H. Witheford elected, 27th April, 1900.

Electoral Districts and Names of Candidates.	Number of Votes recorded. For each Candidate.	Total.
Bay of Plenty:		
Herries, W. H.	2,110	
Lundon, D.	1,852	3,962
Waiapu:		
Carroll, J.	3,153	
FitzRoy, C. A.	1,824	
Dunlop, J. C.	100	5,077
Hawke's Bay:		
Russell, W. R.	†	†
Napier:		
Fraser, A. L. D.	1,994	
McLean, R. D. D.	1,956	3,950
Waipawa:		
Hall, C.	2,332	
Hunter, G.	1,775	4,107
Pahiatua:		
O'Meara, J.	2,058	
Smith, G. H.	1,689	3,747
Masterton:		
Hogg, A. W.	2,591	
Cockburn-Hood, C. E.	1,400	3,991
Wairarapa:		
Hornsby, J. T. M.	1,974	
Buchanan, W. C.	1,818	
Phillips, Coleman	66	3,858
Egmont:		
Symes, W.	2,253	
Monkhouse, W.	1,985	4,238
Taranaki:		
Smith, E. M.	2,405	
Brown, H.	2,278	4,683
Hawera:		
McGuire, F.	1,740	
Major, C. E.	1,685	
Astbury, D. L. A.	638	4,063
Patea:		
Hutchison, G.‡	1,853	
Remington, A. E.	1,729	3,582
Wanganui:		
Willis, A. D.	2,878	
Carson, G.	2,169	
Murphy, J.	108	5,155
Rangitikei:		
Lethbridge, F. Y.	1,985	
Bagnall, J. J.	1,453	
Gascoigne, E.	278	3,716
Palmerston:		
Pirani, F.	1,980	
Wood, W. T.	1,465	
Buick, D.	638	4,083
Manawatu:		
Stevens, J.	1,732	
Bruce, R. C.	1,584	3,316
Otaki:		
Field, H. A.*	1,838	
Morrison, C. B.	1,533	3,371
Suburbs of Wellington:		
Wilford, T. M.	2,298	
Newman, A. K.	1,762	
Kirk, R. C.	491	
Knight, R. G.	9	4,560
City of Wellington:		
Hutcheson, J.	7,436	
Atkinson, A. R.	6,703	
Fisher, G.	6,442	
Macdonald, T. K.	6,320	
Hislop, T. W.	6,297	
Jellicoe, E. G.	4,751	
Luke, C. M.	3,812	
Carmichael, T.	1,004	
Earnshaw, W.	851	
Duncan, D. B.	78	43,694
City of Nelson:		
Graham, J.	2,551	
Hursthouse, R.	1,970	4,521
Motueka:		
McKenzie, R.	2,078	
Moffatt, W. J.	1,012	3,090
Wairau:		
Mills, C. H.	2,786	
Clifford, W. L.	1,413	4,199
Buller:		
Colvin, J.	2,846	
O'Regan, P. J.	2,294	5,140
Grey:		
Guinness, A. R.	2,660	
Hannan, M.	1,874	4,534
Westland:		
Seddon, Rt. Hon. R. J.	†	†
Ashley:		
Meredith, R.	1,943	
Caverhill, T. H.	1,192	3,135
Kaiapoi:		
Buddo, D.	2,186	
Moore, R.	1,705	
Verrall, J. M.	124	4,015
Avon:		
Tanner, W. W.	2,074	
Rhodes, A. E. G.	1,926	4,000

* Died, 10th December, 1899; W. H. Field elected, 11th January, 1900. † Not contested.
‡ Resigned; F. H Haselden elected, 18th July, 1901.

Electoral Districts and Names of Candidates.	Number of Votes recorded. For each Candidate.	Total.
City of Christchurch:		
Collins, W. W.	7,688	
Lewis, C.*	6,346	
Ell, H. G.	6,149	
Taylor, T. E.	5,928	
Smith, G. J.	5,413	
Taylor, C.	5,212	
Donnelly, M.	4,427	
Greig, J.	1,899	43,062
Lyttelton:		
Laurenson, G.	2,700	
Jacques, W.	887	3,587
Riccarton:		
Russell, G. W.	1,867	
Rolleston, W.	1,866	3,733
Ellesmere:		
Rhodes, R. H.	1,760	
Montgomery, W. H.	1,656	3,416
Selwyn:		
Hardy, C. A. C.	1,308	
Rennie, J.	1,168	
Barrett, J.	454	
Wilson, K.	427	3,357
Ashburton:		
McLachlan, J.	2,027	
Harper, C. J.	1,225	
Maslin, W. S.	727	
McKeague, J.	221	4,200
Geraldine:		
Flatman, F. R.	2,331	
McIntosh, C. N.	775	
Fraser, J.	431	3,537
Timaru:		
Hall-Jones, W.	3,091	
Keith, J. S.	816	
Mahoney, J.	72	3,979
Waitaki:		
Steward, W. J.	2,139	
Campbell, J.	712	
Boreham, S.	527	3,378
Oamaru:		
Duncan, T. Y.	2,500	
Macpherson, J. A.	1,246	3,746
Waihemo:		
McKenzie, J.	†	‡

Electoral Districts and Names of Candidates	Number of Votes recorded. For each Candidate.	Total.
Waikouaiti:		
Allen, E. G.	1,749	
White, J.	1,417	3,166
City of Dunedin:		
Millar, J. A.	9,045	
Arnold, J. F.	8,290	
Barclay, A. R.	7,363	
Mackenzie, M. J. S.	6,726	
Sligo, A.	6,415	
Haynes, C.	4,919	
Chapman, C. R.	1,222	43,980
Caversham:		
Morrison, A.	2,860	
Warren, W. H.	1,752	4,612
Taieri:		
Carncross, W. C. F.	1,927	
Begg, A. C.	1,467	3,394
Bruce:		
Allen, J.	1,966	
Anderson, J. C.	1,602	3,568
Tuapeka:		
Bennet, J.	1,758	
Rawlins, C. C.	1,372	
Fraser, A.	323	3,453
Clutha:		
Thomson, J. W.	1,809	
McLeod, F.	1,312	
Malcolm, A. S.	605	3,726
Mataura:		
McNab, R.	2,132	
Raymond, J. W.	1,973	4,105
Wakatipu:		
Fraser, W.	1,895	
Kelly, J.	1,726	3,621
Wallace:		
Gilfedder, M.	1,896	
Carmichael, A. M.	1,677	3,573
Invercargill:		
Hanan, J. A.	2,451	
Kelly, J. W.	2,189	4,640
Awarua:		
Ward, J. G.	2,417	
Murray, W. T.	685	3,102

The Lyttelton poll was taken on the 15th December, 1899, and the Rangitikei poll on the 20th December, 1899.

* Resigned, 24th June, 1901; G. J. Smith elected, 18th July, 1901.

† Not contested. ‡ Resigned; T. Mackenzie elected, 1900.

—	1899.	1896.	1893.
Number of votes recorded for members elected ..	202,324	184,929	153,663
Number of votes recorded for defeated candidates	185,305	174,475	149,413
Total votes recorded* ..	387,629	359,404	303,076
Number of names on rolls in districts uncontested	13,726	..	10,539
Number of names on rolls in districts where elections were contested	360,018	339,230	292,458
Total number of electors on rolls	373,744	339,230	302,997
Total population at last census	703,119	703,119	626,359

* Total number of electors who recorded their votes: 279,330 in 1899, 258,254 in 1896, and 220,082 in 1893.

Occupations of Members of House of Representatives.

The occupations of members elected in 1896 and 1899 show a reduction in the number of the representatives of the farmer class. The table, however, shows that farmers or runholders still furnish more members than any other class of occupation. There were twenty of these (besides seven given as "settlers" or "gentlemen") returned in 1899. There were nine barristers or solicitors, and eight journalists:—

Occupations.	1896.	1899.
Professional—		
Barrister, solicitor	5	9
Journalist	9	8
Mining advocate, interpreter, lecturer, teacher ..	3	4
Commercial—		
Auctioneer	1	1
Director of financial company	..	1
Native agent	..	1
Stationer, bookseller, draper, grocer, butcher ..	3	6
Merchant, iron merchant, timber merchant ..	3	2
Storekeeper	1	2
Commission agent, clerk, accountant	3	2
Industrial—		
Tailor, shoemaker	2	2
Mill-owner, ship-rigger, builder, metallurgical engineer, mine-manager	4	2
Farmer	11	13
Sheep-farmer, runholder, grazier, stock-owner ..	14	7
Others—		
Settler, gentleman	8	7
Contractor	3	3

For Maori Representatives.

(Polling-day, 19th December, 1899.)

Of a Maori population amounting to 39,854 persons at the census of 1896, 13,628 voted at the general election held in December, 1899, an increase of 620 on the number who voted at the election

of 1896. In 1893 the voters numbered 11,269, or 1,739 persons fewer than in 1896, when 13,008 Maoris recorded their votes. As the Native population did not increase between 1891 and 1896, but rather diminished somewhat, it would appear that Maoris are taking more interest as to their representation in Parliament than formerly, or perhaps there is now more convenience for attending to vote, or better knowledge of political affairs. The numbers of voters for the several districts in December, 1899, were:—

Electoral Districts.	Population: Census 1896.			Number who voted.	Per Cent. of Population at all Ages.
	Males.	Females.	Totals.		
North Island—					
Northern Maori ..	5,165	4,010	9,175	2,265	24·69
Eastern Maori ..	6,931	6,064	12,995	5,661	43·56
Western Maori ..	8,247	6,893	15,140	5,096	33·66
Middle Island—					
Southern Maori ..	1,330	1,214	2,544	606	23·82
Totals ..	21,673	18,181	39,854	13,628	34·20

The votes recorded for each candidate were:—

Electoral Districts and Names of Candidates.	Number of Votes recorded. For each Candidate.	Number of Votes recorded. Total.
Northern Maori Electoral District:		
Hone Heke* ..	1,453	
Mutu Kapa	367	
Henry Papa Ururoa (Henry Flavel) ..	225	
Keritoki te Ahu ..	126	
Poata Uruamo ..	94	2,265
Eastern Maori Electoral District:		
Wiremu Pere ..	2,294	
Mohi te Atahikoia ..	1,387	
Hurinui Apanui ..	1,316	
Kereru Numia ..	331	
Tare Mete	207	
Tamati Haweti ..	126	5,661
Western Maori Electoral District:		
Henare Kaihau ..	2,685	
Te Heuheu Tukino ..	873	
Te Aobau Nikitini ..	581	
Waata Hipango ..	440	
Hone Patene ..	199	
Takarangi Mete Kingi	173	
Wiremu Ngapaki ..	145	5,096
Southern Maori Electoral District:		
Tame Parata ..	387	
Taituha Hape ..	219	
Total		13,628

* Resigned; re-elected, 9th January, 1901.

On the succeeding page will be found a tabular statement giving the results of each general election since the year 1853 for purposes of European representation.

GENERAL ELECTIONS FOR EUROPEAN REPRESENTATIVES HELD FROM THE YEAR 1853.

Parliament.	Date of General Election.	Number of Names on Roll of Electors.	Number of Members returned.	Number of Members returned unopposed.	Number of Votes recorded (or of Voters recording Votes).	Population of the Colony at end of Year.	Average Number of Persons to each Member.	Persons to each Elector.	Electors to each Member.
First	1853	[1] 5,934	37	*	*	30,000	811	5·1	160
Second	1855	[2] 10,324	37	*	*	37,192	1,005	3·6	279
Third	1861	13,466	53	*	*	79,711	1,504	5·9	254
Fourth	1866	[3] 33,338	72	*	*	190,607	2,647	5·7	463
Fifth	1871	47,275	74	*	*	248,400	3,357	5·3	639
Sixth	1875	61,755	84	*	*	375,856	4,474	6·1	735
Seventh ..	1879	82,271	84	14	43,776	463,729	5,521	5·6	979
Eighth	1881	120,972	91	11	69,985	500,910	5,505	4·1	1,329
Ninth	1884	137,686	91	11	74,672	564,304	6,201	4·1	1,513
Tenth	1887	175,410	91	5	111,911	603,361	6,630	3·4	1,928
Eleventh ..	1890	183,171	70	6	136,337	625,508	8,936	3·4	2,617
Twelfth	1893	[4]302,997	70	3	[4][5]220,082	672,265	9,604	2·2	4,328
Thirteenth ..	1896	[4]339,230	70	..	[4][5]258,254	714,162	10,202	2·1	4,852
Fourteenth ..	1899	[4]373,744	70	3	[4][5]279,330	756,505	10,807	2·0	5,399

* Information not obtainable.

[1] Including 100, the estimated number in Akaroa District, for which there is no return.
[2] Including 800, the estimated number in the electorates of Town of New Plymouth, Grey and Bell, and Omata, for which districts there are no returns.
[3] Electors for the Electoral District of "The Otago Goldfields" not included.
[4] Men and women.
[5] Voters recording votes.

SECTION XIV.—AGRICULTURE.

UNTIL 1895 the agricultural statistics were collected and compiled by the Registrar-General, under authority of "The Census Act, 1877," annually in the month of February, except in census years, when the collection was made with the enumeration of the people. Under this Act statistics of the acreage in grass and in all kinds of cultivation were taken; and, at the same time, the estimated yields of all the principal crops were obtained from the farmers themselves.

By the Agricultural and Pastoral Statistics Act, passed in 1895, the duty of collecting the returns devolved upon the Department of Agriculture. The plan now adopted under the Act of 1895 is similar to that used in the United Kingdom, the account of land laid down in crop being made up much earlier than formerly, while estimates of produce are made after the results of threshing are known.

Statistics of the land in cultivation were accordingly collected in October, 1900, and an interim return of the compiled results was published in detail in the *New Zealand Gazette* of the 20th December, 1900, while the corrected acreages under each description of crop were made public on the 8th March following. A summary of the particulars then given is shown in the accompanying tables, with the finally corrected statements of yield of the principal crops; but, in comparing these figures with the results obtained in former years, it must be remembered that, under the new Act, statistics of the acreage and crops of land held and cultivated by Maoris are included; whereas previously information about the farming carried on by Maoris was obtained only when a census of the Native race was taken.

Full remarks on the progress of agriculture in New Zealand, in respect of all its features in detail, are supplied by Mr. Murphy, of Christchurch, in the special article devoted to the subject, which appears as the first of Section II. in Part III.

ACREAGE AND ACTUAL YIELD IN PRINCIPAL CORN-CROPS, 1901.

Provincial Districts.	Wheat.			Oats.			Barley.			Rye.			Maize.		
	Acres.	Yield per Acre, in Bushels.	Total Bushels.	Acres.	Yield per Acre, in Bushels.	Total Bushels.	Acres.	Yield per Acre, in Bushels.	Total Bushels.	Acres.	Yield per Acre, in Bushels.	Total Bushels.	Acres.	Yield per Acre, in Bushels.	Total Bushels.
Auckland	3,061	20·18	61,774	6,980	32·68	228,144	832	24·03	19,992	75	20·00	1,500	13,377	35·80	478,928
Taranaki	920	28·71	26,414	5,144	43·37	223,135	298	38·38	11,440	32	32·50	1,040	181	22·18	4,014
Hawke's Bay ...	914	20·90	18,908	5,676	35·21	199,870	970	27·58	26,760	59	30·00	1,770	490	40·32	19,775
Wellington ...	5,845	29·82	174,306	25,435	38·71	984,591	701	34·97	24,515	72	25·15	1,810	171*	...	...
Marlborough ...	2,851	24·34	69,394	3,772	35·00	132,020	4,833	29·41	142,186	69	20·48	1,413	2*	...	...
Nelson	1,996	29·73	59,331	5,021	32·84	164,870	4,305	22·15	95,379	17*	...	...	10*	...	...
Westland	...	...	...	7*	...	...	...	...	...	...	...	...	...	...	...
Canterbury ...	146,668	31·75	4,656,775	178,024	41·94	7,476,087	12,092	39·85	480,858	76	25·00	1,900	1*	...	...
Otago	44,210	33·02	1,460,252	219,475	44·09	9,677,120	6,800	33·31	226,521	988	22·00	21,736	...	...	...
Totals	206,465	31·61	6,527,154	449,534	42·45	19,085,837	30,831	33·33	1,027,651	1,388	22·45	31,169	14,232	35·78	502,69

*Not included in averages.

NUMBER OF ACRES UNDER CULTIVATION IN EACH PROVINCIAL DISTRICT, 1901.

Provincial Districts	In Grass or Clover, sown after land ploughed.	In Grass, surface-sown: land not ploughed.	In Hay, included in either or both of the previous Columns.	In Bare Fallow.	In Grain-crops (for threshing only).	In Green and other Crops.	In Garden.	In Orchard or Vineyard.	Total in Grass, Crop, and Fallow.	In Plantations of Forest-trees.	Tussock or Native Grass, and unimproved.
Auckland ..	561,013	1,324,055	10,564	17,257	26,753	84,884	3,906	10,906	2,028,774	8,907	3,253,835
Taranaki ..	144,516	569,202	8,026	160	6,706	15,680	957	950	738,171	1,201	269,180
Hawke's Bay ..	380,791	1,324,900	10,291	3,391	8,530	24,091	1,144	1,364	1,744,211	3,883	1,453,645
Wellington ..	274,335	2,213,930	9,851	1,787	33,607	58,232	2,288	3,972	2,588,151	4,406	1,232,211
Marlborough ..	93,686	216,413	2,936	698	13,004	17,275	242	433	341,751	1,118	1,974,280
Nelson ..	118,569	370,138	3,521	545	12,490	29,234	535	2,458	533,969	1,752	1,478,850
Westland ..	10,383	39,668	710	1	7	1,185	26	246	51,516	3	496,347
Canterbury ..	1,459,606	322,346	16,394	10,515	346,413	265,906	4,500	3,000	2,412,286	23,435	4,013,441
Otago ..	1,382,839	275,522	5,730	33,393	273,815	268,564	3,813	2,448	2,240,394	4,689	8,011,167
Totals ..	4,425,738	6,656,174	68,023	67,747	721,325	765,051	17,411	25,777	12,679,223	49,394	22,182,956

ACREAGE UNDER SOWN GRASSES, AND CULTIVATION GENERALLY, FOR EACH COUNTY, AS ON THE 15TH OCTOBER, 1900.

Counties.	In Sown Grasses, after having been ploughed.	In Sown Grasses, not previously ploughed.	Land broken up but not under Crop.	Total under Crop.	In Garden.	In Orchard.	Plantations of Forest Trees.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Mangonui	5,158	11,708	298	1,324	80	209	18
Whangaroa ..	741	4,049	..	153	20	85	2
Hokianga	1,073	20,861	21	848	146	299	47
Bay of Islands ..	4,519	26,230	60	963	107	251	30
Hobson	2,398	55,777	769	955	141	300	156
Whangarei ..	22,779	71,068	106	1,840	144	1,088	42
Otamatea	6,598	59,367	191	520	70	354	24
Rodney	8,507	73,272	783	836	233	1,068	129
Waitemata ..	21,974	27,862	1,295	1,787	332	2,062	250
Eden	15,366	3,898	73	1,374	1,045	434	227
Manukau	102,511	86,434	7,679	20,532	468	1,432	867
Coromandel ..	2,533	8,217	8	177	93	65	..
Thames	4,653	7,067	95	637	47	417	22
Ohinemuri ..	6,025	9,350	179	1,250	111	97	30
Piako	117,583	50,287	3,009	23,276	136	288	1,050
Waikato	48,428	29,330	922	10,408	75	466	4,747
Waipa	71,744	10,353	808	13,200	164	577	477
Raglan	15,333	75,016	213	3,275	60	208	60
Kawhia	4,175	36,256	208	1,501	27	86	72
Taupo, East and West	10,189	16,864	6	1,894	25	32	58
Rotorua	1,922	3,087	70	686	28	20	208
Tauranga	28,122	18,925	114	8,115	114	431	142
Whakatane	5,746	8,140	..	5,808	9	83	15
Opotiki	9,251	8,159	308	3,827	76	55	6
Waiapu	4,503	165,623	..	849	17	22	12
Cook	39,182	436,855	42	5,602	138	477	216
Wairoa	18,195	284,687	55	2,712	136	159	117
Hawke's Bay ..	191,619	402,873	246	16,548	644	727	1,653
Waipawa	110,094	377,280	3,015	10,316	300	372	1,717
Patangata	60,883	260,060	75	3,045	64	106	396
Taranaki	53,905	136,117	98	6,285	407	404	296
Hawera	43,255	142,650	61	7,853	276	157	417
Patea	35,251	109,462	1	5,195	77	216	456
Clifton	10,333	44,911	..	1,982	63	132	13
Stratford	1,772	136,062	..	1,071	134	41	19
Waitotara	25,715	74,577	60	3,563	170	234	140
Wanganui	15,435	176,917	77	4,150	146	354	224
Rangitikei ..	56,560	205,603	154	16,464	141	405	873
Oroua	13,887	164,863	116	12,595	310	816	406
Kiwitea	1,690	139,217	8	2,261	27	177	51
Pohangina	339	75,828	23	597	8	155	3
Manawatu ..	50,520	55,818	589	14,665	108	151	328
Horowhenua ..	2,624	99,224	63	2,629	194	303	239
Pahiatua	916	141,374	12	1,268	118	233	41
Wairarapa North ..	29,549	379,545	387	11,945	198	320	501
Akitio	1,018	97,133	8	236	57	46	38
Eketahuna ..	265	59,366	9	397	69	75	3
Mauriceville ..	379	35,284	2	177	18	31	12

ACREAGE UNDER SOWN GRASSES, ETC.—*continued.*

Counties.	In Sown Grasses, after having been ploughed.	In Sown Grasses, not previously ploughed.	Land broken up but not under Crop.	Total under Crop.	In Garden.	In Orchard.	Plantations of Forest Trees.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Wairarapa South ..	66,951	355,672	250	18,905	199	341	1,308
Hutt	8,487	153,509	29	1,987	525	331	239
Sounds	3,058	91,003	251	1,240	62	147	32
Marlborough ..	62,832	102,341	437	26,091	159	262	1,042
Kaikoura	27,796	23,069	10	2,948	21	24	44
Collingwood ..	3,233	33,723	4	1,276	16	241	3
Waimea	30,950	154,090	316	22,202	279	1,948	269
Buller	1,008	6,824	..	133	49	110	..
Inangahua ..	5,175	41,925	..	930	24	69	6
Amuri	53,190	112,613	221	7,244	67	28	1,075
Cheviot	25,013	20,963	4	9,939	100	62	399
Westland	4,780	21,548	1	668	18	104	2
Grey	5,603	18,120	..	524	8	142	1
Ashley	246,920	112,384	1,079	90,319	678	481	2,164
Selwyn	290,249	24,813	2,076	144,190	1,936	1,215	6,548
Akaroa	36,323	140,792	1	3,946	146	289	256
Ashburton ..	382,325	15,328	2,933	171,892	621	386	9,944
Geraldine	135,445	8,390	1,012	60,246	214	242	2,015
Levels	85,864	1,631	754	42,426	409	243	1,051
Waimate	225,618	13,633	2,405	82,873	443	119	774
Mackenzie ..	56,864	5,375	255	16,427	53	31	683
Waitaki	194,929	14,714	4,609	68,957	401	239	1,067
Waihemo	32,278	11,563	528	12,024	103	53	131
Waikouaiti ..	17,636	56,158	340	7,279	85	129	105
Peninsula	2,915	11,101	..	1,619	183	68	86
Taieri	83,530	15,468	974	29,778	586	417	485
Bruce	96,113	11,126	1,029	40,571	182	72	347
Clutha	171,135	29,984	1,322	54,391	316	150	484
Tuapeka	102,042	26,985	1,895	34,381	278	282	234
Maniototo	41,023	2,446	1,692	19,396	258	16	218
Vincent	18,416	2,365	3,006	12,945	92	193	83
Lake	12,724	5,114	3,428	11,868	108	133	191
Southland	454,571	43,394	13,247	190,388	994	572	987
Wallace and Fiord ..	155,494	39,761	1,323	58,772	215	120	269
Stewart Island ..	33	5,343	..	10	12	4	2
Total	4,425,738	6,656,174	67,747	1,486,376	17,411	25,777	49,394

The extent of land in cultivation (including sown grasses and land broken up but not under crop) amounted to 12,679,223 acres. Of this area, land under artificial grasses comprised 87·40 per cent.; land under grain-crops, 5·69 per cent.; land under root and green crops, 6·03 per cent.; land in garden and orchard, 0·34 per cent.; and land in fallow, 0·54 per cent. Full details for the last fourteen years are tabulated.

NUMBER OF ACRES IN GRASS, UNDER EACH CLASS OF CROP, AND IN BARE FALLOW, 1888 TO 1901.

Year.	In Grass or Clover, sown after land ploughed.	In Grass or Clover, surface-sown: land not ploughed.	In Hay, included in either or both of the previous Columns.	In Bare Fallow.	In Grain-crops (for threshing only).	In Green and other Crops.	In Garden.	In Orchard or Vineyard.	Total in Grass, Crop, Fallow, Garden, and Orchard.	In Plantations of Forest-trees.
1888	2,884,007	3,053,052	67,812	154,266	738,603	454,824	8,608	16,329	7,309,689	28,565
1889	2,941,888	3,337,423	50,656	142,747	793,866	454,243	8,561	15,246	7,693,974	33,938
1890	3,027,912	3,497,137	45,889	149,979	826,505	513,893	8,568	15,771	8,039,765	28,928
1891	3,250,543	3,715,675	44,045	210,509	703,329	582,439	9,810	17,047	8,489,352	35,310
1892	3,327,755	4,076,126	46,652	140,454	769,778	579,112	9,608	19,627	8,922,460	38,723
1893	3,611,393	4,650,652	61,811	154,254	753,091	544,355	9,763	20,085	9,743,593	40,401
1894	3,865,348	4,833,549	60,740	142,342	669,850	551,962	9,951	21,109	10,094,111	39,826
1895	3,908,581	4,921,136	56,614	140,494	560,179	597,686	10,263	21,401	10,159,740	55,386
1896	4,254,983	5,030,247	96,818	58,039	674,850	680,750	17,749	19,362	10,735,980	43,246
1897	4,308,720	5,733,138	109,466	57,158	688,297	762,762	16,924	22,291	11,589,290	47,630
1898	4,123,304	5,743,245	67,865	60,792	727,038	790,184	16,177	22,387	11,483,127	52,546
1899	4,065,860	6,178,879	75,620	51,164	892,468	796,235	16,930	22,983	12,024,519	47,216
1900	4,337,594	6,515,708	68,234	78,751	745,685	796,773	16,890	24,401	12,515,802	48,942
1901	4,425,738	6,656,174	68,023	67,747	721,325	765,051	17,411	25,777	12,679,223	49,394

Wheat.

The wheat harvest of 1901 showed an average yield of 31·61 bushels per acre, the crop realised being 6,527,154 bushels, against 8,581,898 bushels, in 1900, 13,073,416 bushels in 1899, 5,670,017 bushels in 1898, 5,926,523 bushels in 1897, 6,843,768 bushels in 1896, 3,613,037 bushels in 1895, 4,891,695 bushels in 1894, 8,378,217 bushels in 1893, and 10,257,738 bushels in 1892.

The quantity of wheat of last season's harvest held by farmers in October, 1900, as shown by the gazetted figures, was 4,506,412 bushels, an amount which, exclusive of stocks of grain and flour held by merchants and millers, is more than sufficient to meet demands for consumption in the colony for a whole year. The total amount of wheat exported during the year 1900 was 2,867,069 bushels, while the imports were only 100 bushels, most probably for seeding purposes.

The imports of flour during 1900 were 173 centals (8¾ tons), and the exports 2,613 tons.

The area under wheat for threshing decreased from 269,749 acres in 1900 to 206,465 acres in 1901; and this decrease of 63,284 acres was shared by all the provincial districts. In addition to the area cut for threshing, 756 acres were cut for chaff, and 13 acres for ensilage, while 850 acres were fed down with stock, so that the total area sown in wheat was 208,084 acres.

Of the 206,465 acres in wheat (for threshing) this year, no less than 146,668 acres were in Canterbury, and 44,210 acres in Otago.

The area under wheat for grain, the estimated gross produce in bushels, and the average yield per acre for each of the last eleven years were:—

Year.	Land under Wheat.	Estimated Gross Produce.	Average Yield per Acre.
	Acres.	Bushels.	Bushels.
1891	301,460	5,723,610	18·99
1892	402,273	10,257,738	25·50
1893	381,245	8,378,217	21·98
1894	242,737	4,891,695	20·15
1895	148,575	3,613,037	24·32
1896	245,441	6,843,768	27·88
1897	258,608	5,926,523	22·92
1898	315,801	5,670,017	17·95
1899	399,034	13,073,416	32·76
1900	269,749	8,581,898	31·81
1901	206,465	6,527,154	31·61

The following gives the area in wheat and the estimated produce, for the Australian Colonies, for the season of 1900:—

Colony.	Wheat-crop.		
	Acres.	Bushels.	Bushels per Acre.
Queensland	52,527	614,414	11·70
New South Wales	1,426,166	13,604,166	9·54
Victoria	2,165,693	15,237,948	7·04
South Australia	1,821,137	8,453,135	4·64
Western Australia	84,516	987,329	11·68
Tasmania	64,328	1,101,303	17·12

Consumption of Wheat.

The yearly consumption of wheat per head of population in New Zealand, as previously stated, has been estimated at 6 bushels.

The difficulty of correctly computing the consumption of bread-stuffs is shown by the great differences in the estimates arrived at.

The average quantity required per head of the population (exclusive of that used for seed) has been calculated at 6·4 bushels for New South Wales, and 4½ to 5 bushels for Victoria, by statisticians in those colonies.

The average consumption of wheaten bread-stuffs in New Zealand thus appears to be somewhat higher than in Victoria.

The following is the average annual consumption of wheat per inhabitant in some of the principal countries of the world:—

United Kingdom	5·6 bushels.
Canada	6·6 "
France	8·1 "
Germany	3·0 "
Russia	2·1 "
Italy	5·4 "
United States	4·5 "

The English consumption during the last twenty-five years appears to have ranged from 5½ to 6 bushels per head of population.

Wheat-crop of the World.

In the next table the wheat crop of the world for the five years 1893 to 1897 is shown, and from this it will be seen that the importance of Australasia in the wheat market of the world is not great: out of a total production of about 2,245 million bushels in 1897, only thirty-four million bushels, or 1·5 per cent., were grown in the Australasian Colonies:—

WHEAT CROP OF THE WORLD FOR THE YEARS 1893 TO 1897 INCLUSIVE.

Country.	1893.	1894.	1895.	1896.	1897.
	1,000 Bushels.	1,000 Bushels.	1,000 Bushels.	1,000 Bushels.	1,000 Bushels.
Europe—					
Russia and Poland	359,873	383,862	333,479	343,877	292,000
France	277,980	343,113	348,280	335,881	248,000
Hungary	149,069	152,305	152,345	143,949	102,000
Italy	130,355	117,958	111,960	131,953	96,000
Germany	109,562	110,359	102,363	103,964	100,000
Spain	83,968	103,964	103,964	79,972	96,000
Roumania	58,379	42,386	65,978	68,975	40,000
United Kingdom	50,383	59,176	37,986	57,978	54,000
Bulgaria	33,986	35,988	45,982	49,982	32,000
Caucasia	65,177	59,980	63,976	43,984	28,000
Turkey	31,988	27,988	35,988	39,984	28,000
Austria	42,396	47,183	40,385	35,988	34,000
Belgium	16,793	18,394	18,394	19,992	20,000
Servia	8,797	7,996	9,998	13,994	6,800
Greece	7,996	7,199	5,998	5,998	5,200
Holland	5,598	4,797	5,197	5,998	5,200
Switzerland	4,400	5,197	4,797	4,797	4,000
Denmark	4,477	4,000	4,400	4,000	4,000
Norway-Sweden	3,600	3,600	4,400	4,000	4,000
Portugal	5,598	6,799	5,598	4,000	6,000
Totals	1,450,375	1,542,244	1,501,468	1,499,266	1,205,200
America—					
United States	455,838	511,818	495,822	447,842	560,000
Canada	47,984	43,984	53,982	33,986	56,000
Mexico	11,195	11,996	11,996	9,998	12,000
Argentine	82,371	59,980	45,982	31,988	48,000
Chili	17,994	13,193	13,594	11,996	16,000
Uruguay	6,398	7,996	9,998	5,998	8,000
Totals	621,780	648,967	631,374	541,808	700,000
Asia—					
India	267,104	252,710	255,108	204,729	192,000
Asia Minor	31,988	27,988	31,988	35,988	48,000
Persia	15,992	17,994	19,992	19,992	20,000
Syria	11,996	9,998	9,998	11,996	12,000
Totals	327,080	308,690	317,086	272,705	272,000
Africa—					
Algeria	14,795	19,992	17,994	19,992	16,000
Egypt	9,998	9,998	9,998	7,996	8,000
Tunis	3,400	5,998	5,598	5,197	4,800
Cape Colony	4,397	4,797	4,797	4,397	4,800
Totals	32,590	40,785	38,387	37,582	33,600

WHEAT-CROP OF THE WORLD—*continued.*

Country.	1893.	1894.	1895.	1896.	1897.
	1,000 Bushels.	1,000 Bushels.	1,000 Bushels.	1,000 Bushels.	1,000 Bushels.
Australasia—					
New South Wales ..	6,503	7,041	5,195	8,854	10,560
Victoria	15,255	11,446	5,669	7,076	10,580
Queensland ..	413	545	124	601	1,009
South Australia ..	13,618	7,781	5,929	2,804	4,015
Western Australia ..	520	170	188	244	409
Tasmania	834	872	1,165	1,286	1,668
New Zealand ..	4,892	3,613	6,844	5,927	5,670
Totals ..	42,035	31,468	25,114	26,792	33,911
Grand Totals ..	2,473,860	2,572,154	2,513,429	2,378,153	2,244,711

Oats.

The extent of land in oats grown for grain in 1901 was 449,534 acres, against 398,243 acres in the preceding year, an increase of 51,291 acres. The Provincial Districts of Otago (219,475 acres) and Canterbury (178,024 acres) account for 397,499 acres of the total area, Wellington taking third place with 25,435 acres. The breadth of land in oats for chaffing, ensilage, or feeding down with stock was 191,507 acres, a decrease of 1,945 acres on the figures for 1900.

The average yield per acre was, in 1900, 40·99, and in 1901, 42·45 bushels, the quantity of produce increasing from 16,325,832 bushels to 19,085,837 bushels.

The oat-crop for 1900 in the Australian Colonies was as follows:—

	Acres.	Bushels.	Average per Acre.
Queensland	714	10,712	15·0
New South Wales ..	29,125	627,904	21·6
Victoria	271,280	6,116,046	22·5
South Australia ..	20,229	218,331	10·8
Western Australia ..	3,940	73,556	18·7
Tasmania	45,110	148,160	25·5

Maize.

This is a very important crop. In 1901 there were 14,232 acres sown for grain, the estimated yield being 502,697 bushels of corn, an average of nearly 36 bushels per acre. Maize is grown only in the North Island, with the exception of a few acres in Nelson and Canterbury. The Provincial District of Auckland had 13,377 acres; Hawke's Bay, 490 acres; Taranaki, 181 acres; and Wellington, 171 acres, in 1901. As considerable interest is taken in this crop, the group of counties where it is chiefly grown is stated, viz.: Hobson, Manukau, Rodney, Whangarei, Mongonui, Hokianga, Raglan, Tauranga, Whakatane, Opotiki, Cook, Wairoa, and Hawke's Bay. Small acreages are found in all the counties of the Auckland, Taranaki, and Hawke's Bay districts and in most of the counties in Wellington.

Barley.

Under barley, 30,831 acres were returned in 1901, the estimated crop being 1,027,651 bushels, an average yield per acre of 33·33 bushels. In 1900 the area under barley was 48,003 acres, and the yield 1,585,145 bushels, or 33·02 bushels per acre.

Rye.

There were 1,388 acres in rye, yielding 31,169 bushels, or at the rate of 22·45 bushels per acre in 1901, against 2,081 acres and 52,214 bushels, the rate being 25·09 bushels per acre, in 1899–1900.

Peas and Beans.

The area under peas for threshing in the season 1901 was 5,888 acres, yielding 214,211 bushels, or an average of 36·38 bushels per acre, against 7,086 acres and 241,090 bushels, or 34·02 bushels per acre, in the previous year.

Under beans there were 2,927 acres, giving a return of 99,964 bushels, the average being 34·29 bushels per acre, against 3,094 acres and 115,488 bushels (37·33 bushels per acre) in 1900.

Potatoes.

The area under potatoes was 28,524 acres in 1901, yielding the return of 169,042 tons, or a rate of 5·9 tons per acre, against 36,984 acres in 1900, and 222,124 tons (or 6 tons per acre), a decrease of 8,460 acres and 53,082 tons.

A comparison of the gross yield of potatoes with the amount exported in each of the twelve years, 1883–94, showed that for such period an average of 597 lb. per head of population was retained in the colony. Allowing for waste, pig-feed, and seed, the average amount retained for human consumption was found to be 449 lb. a head.

Turnips.

Turnips and rape form a most important crop in a sheep-breeding country such as New Zealand, and in 1892 the area of land under this crop amounted to 422,359 acres. The returns for 1895 gave only 385,788 acres, but for the present year 528,651 acres (404,333 acres in turnips and 124,318 in rape) were set down as under these crops, and there were in addition 9,353 acres in mangolds (7,341 acres), beet (385 acres), and carrots (1,627 acres).

The cost of growing turnips sown broadcast and in drills may be: Broadcast—Ploughing, 5s. 6d. per acre; harrowing, 3s. per acre; rolling, 1s. per acre; seed and sowing, 1s. 6d. per acre: total, 11s. per acre. Drill—Ploughing, 5s. 6d; grubbing, 3s.; harrowing, 3s.; rolling, 1s.; drilling, 3s. 6d.; hand-hoeing, 10s.; horse-hoeing, 5s.; seed and sowing, 2s. 6d.; manure, 10s. to 15s.: total, £2 3s. 6d. to £2 8s. 6d. per acre.

Hops.

There were 1,050 acres under hops in 1901, as against 994 acres last year. No account of the produce for the last six years was

taken, but in 1895 the yield was 7,556 cwt. In 1895 the total quantity used by the breweries in the colony amounted to 3,793 cwt. Of the land under hops in 1901, 891 acres were in the Waimea County, and 135 in Collingwood, both in the Provincial District of Nelson. The import of hops in 1900 amounted to 841 cwt., and the exports to 2,891 cwt., of which 2,876 cwt. were the produce of the colony.

Tobacco.

The growing of tobacco does not progress in New Zealand. In 1889, 34 acres were being cultivated; in 1890, 25 acres; in 1891, 16 acres; in 1892, 6 acres; in 1893, 4 acres; in 1894, 4 acres; and in 1895, 5 acres, producing 1,599 lb. of dried leaf. Statistics of this crop have not been taken since 1895.

Gardens and Orchards.

The extent of land in garden was 17,411 acres, of which 13,743 acres were private gardens, and 3,668 acres market gardens. In plantations of forest-trees there were 49,394 acres.

There were 25,255 acres in orchard in 1901, an increase of 1,299 acres on the area so returned in the previous year, and 522 acres were returned as "vineyard." The fruit-crop of the colony is supplemented by a considerable import from the Australian Colonies and Fiji.

Sown Grasses and Seeds.

New Zealand is essentially suited for grazing purposes. Wherever there is light and moisture, English grasses thrive when the natural bush and fern are cleared off. In fact, the white clover gradually overcomes the fern; and, from the mildness of the winter season, there are few places where there is not some growth, even in the coldest months of the year. In all parts of the colony stock live, although in varying condition, without other food than such as they can pick up. Sown grass land, as might be expected, heads the list of cultivations.

At the beginning of the year 1901 there were 11,081,912 acres under artificial grasses. Of these, 4,425,738 acres had been previously ploughed, presumably under grain or other crops, while 6,656,174 acres had not been ploughed. Much of the latter area was bush or forest land, sown down in grass after the timber had been wholly or partially burnt off.

The area under ryegrass for seed in the season of 1901 was 23,270 acres, yielding 475,418 bushels of 20 lbs., or a rate of 20·44 bushels per acre, against 39,543 acres and 993,184 bushels, an average of 25·12 bushels per acre, in 1899–1900.

In cocksfoot there were 35,758 acres, which yielded 5,401,764 lb., or an average of 151 lb. per acre, against 54,718 acres and 9,026,906 lb. (a rate of 165 lb. per acre) in the previous year.

Seeds for sowing pasture lands are used much as in Great Britain, the following being a common mixture: Perennial ryegrass,

25 lb. to 30 lb. per acre; cocksfoot, 2 lb.; alsike, 2 lb.; timothy, 3 lb.; cowgrass, 2 lb.; red clover, 2 lb.; white clover, 2 lb.; rape, 1 lb.: total, 39 lb. to 44 lb. per acre. Pastures are renewed at intervals of from four to eight years, according to the nature of the land.

The following shows the acreage in sown grasses in the Australasian Colonies in 1899–1900:—

	Acres.
Queensland	19,228
New South Wales	378,852
Victoria	154,232
South Australia	21,593
Western Australia	2,590
Tasmania	290,618
New Zealand	10,853,302

It will be observed that the acreage of land under sown grasses was more than twelve times as great in New Zealand as in the whole of Australia and Tasmania. When compared in size with the colonies of Australia, New Zealand is not large—about one-thirtieth of their total area—but in respect of grazing capabilities the relative importance of this country is much greater. Australia is generally unsuitable, owing to conditions of climate, for the growth of English grasses, and the amount of feed produced by the natural grasses throughout the year is very much less per acre than is obtained from the sown grass lands in New Zealand; indeed, it may be said that the average productiveness of grass-land is about nine times as great here as in Australia, or, in other words, that land in this colony covered with English grasses may be considered equal, for grazing purposes, to an area of Australian land about nine times as great.

In addition to the artificially-sown pastures, the returns for 1901 show that 22,182,956 acres of unimproved land, including that in tussock or native grass, belonged to the occupied holdings, and were available for stock-feeding by the sheep-farmers and cattle-farmers of the colony.

The Dairy Industry.

A few remarks are given on the present condition of the dairy industry:—

The tendency seems to be in the direction of building up large central butter factories, with contributing skimming stations, situated at convenient points in the surrounding country. Already some of the New Zealand factories are large institutions, having a daily output of from one to five tons of butter. It can be said also that the best of these factories are as well built and equipped for the manufacture of fine butter as those to be found in any other country. Such a system, where large quantities of butter are made under the direction of one man, tends towards uniformity in the quality of the product. Large factories are more apt to be well equipped than very small ones, and the volume of business done enables the company or proprietors to pay sufficient salary to secure picked men for managers. The fact that these large factories do exist, where a fair salary may be earned, is an inducement for superior men to follow the work. It is one of the hopeful signs for the future of New Zealand dairying that the factory managers are, as a whole, a very excellent class of men.

Government Aid to the Dairy Industry.

The Department of Agriculture assists the dairy industry mainly through the "dairying-service" branch. At the head of this branch is the Dairy Commissioner, who is assisted by two dairy instructors and seven dairy produce graders, who also act occasionally as instructors. Meetings are addressed on dairying topics, and practical instructions are given at the factories to butter- and cheese-makers, as well as advice to the directors of dairy companies. A large amount of correspondence is attended to, which includes a wide range of technical subjects relating to the manufacture of butter and cheese, the testing of milk, and the organization and equipment of factories. Information on special subjects is disseminated by means of leaflets and pamphlets circulated free from time to time, as occasion may arise.

Grading of Dairy Produce.

Butter intended for export must be sent to one of the Government cool-stores to be graded. Butter which is to be sent to Great Britain is frozen after being graded, and given free storage for one month, or until the leaving of the first steamer having available space. Butter for Australian markets is held in ordinary storage only, as the ships which carry it have no refrigerated space. It is stored free for one week. The department also pays the cost of handling in and out of the stores. Cheese is graded at the port of shipment, but not received into the Government cool-stores except under exceptional circumstances.

Reports are given by the grader to the manufacturer of the butter or cheese, showing in detail the result of his examination of each parcel. These reports are becoming a recognised commercial document, and are often attached to bills of lading. Contracts are based on them, and thus they facilitate business as well as protect the local shipper.

Dairy Factories, August, 1901.

Districts	Butter Factories.	Cheese Factories.	Butter and Cheese Factories combined.	Skimming Stations.
Auckland	20	10	..	55
Taranaki	87	6	12	60
Hawke's Bay ..	6	2	1	5
Wellington ..	31	16	..	58
Marlborough ..	1	3	..	..
Nelson	5	1	..	..
Westland	3	..	..	3
Canterbury ..	7	10	..	16
Otago	9	32	2	35
Total ..	169	80	15	232

SECTION XV.—MINING.

THE natural mineral resources of New Zealand are very great, and have exercised in the past a most important influence on the development and progress of the colony. Gold to the value of £57,406,100 was obtained prior to the 31st December, 1900; the value of the produce for the year 1900 having been £1,439,602. In the earliest years the gold was obtained from alluvial diggings, but at the present time much is taken from gold-bearing quartz, which is distributed widely through several parts of the colony, and thus there is a much better prospect of the permanency of this industry than alluvial diggings could give. The greater portion of the gold obtained is, however, still got from alluvial workings.

The yield of silver to the end of 1900 amounted to £315,548 in value, the quantity mined in 1900 having been 326,457 oz., valued at £38,879.

Of other minerals, the value of the product to the same date amounts to £18,383,333, of which kauri-gum yielded £10,329,831, and coal, with coke, £7,782,206.

The quantities and values of precious metals and minerals obtained during the year 1900, and the total value of all mining produce since 1853, are:—

	1900.		Total Value since 1853.
	Oz.	£	£
Gold	373,616	1,439,602	57,406,100
Silver	326,457	38,879	315,548
	700,073	1,478,481	57,721,648
	Tons.		
Copper-ore ..	12	45	17,983
Chrome-ore ..	28	110	37,477
Antimony-ore ..	3	101	52,462
Manganese-ore ..	166	588	60,232
Hæmatite-ore ..	..	..	226
Mixed minerals ..	..	12,751	102,916
Coal	1,093,990	588,778	7,757,402
Coke (exported) ..	..	..	24,804
Kauri-gum ..	10,159	622,293	10,329,831
		£2,703,147	£76,104,981

Of the gold entered for exportation during the year ended the 31st March, 1901—viz., 392,976 oz., representing a value of

£1,516,482—over 59 per cent. came out of quartz-mines; but, if the total yield of gold obtained in the colony be taken, the value of which to 31st March, 1901, is £57,856,200, about 25 per cent. came from quartz-mines, and 75 per cent. from alluvial workings.

MINERAL PRODUCTION (VALUE) OF AUSTRALASIA TO END OF 1899.

The total value of mineral production in the Australasian Colonies to the end of the year 1899 is shown in the following table. The figures, except those for New Zealand, are taken from Mr. Coghlan's "Statistics of the Seven Colonies of Australasia, 1899-1900":—

Colony.	Gold.	Silver and Silver-lead.	Copper.	Tin.	Coal.	Other Minerals.	Total.
	£	£	£	£	£	£	£
New S'th Wales	47,546,013	27,882,997	5,019,480	6,382,538	35,647,004	3,455,913	125,933,945
Victoria ...	254,156,820	856,539	206,395	706,300	793,568	243,994	256,963,616
Queensland ...	47,338,074	713,089	2,032,425	4,526,102	2,458,407	262,811	57,330,908
South Australia	2,212,787	106,043	21,935,954	26,322	...	460,931	24,742,037
W'st'n Australia	16,906,449	250	208,053	101,497	27,576	382,633	17,626,458
Tasmania... ...	4,282,192	1,925,578	2,102,048	6,883,306	385,303	328,777	15,907,204
New Zealand ...	55,966,498	276,669	17,938	...	7,099,615	9,934,023*	73,294,743
Australasia ...	428,408,833	31,761,165	31,522,293	18,626,065	46,411,473	15,069,082	571,798,911

* Including kauri-gum valued at £9,707,588.

GOLD-MINING.

The history of the finding of gold in this colony was briefly sketched in the Year-books for 1893 and 1894, and need not, therefore, be repeated here, but a word may be said on recent developments in mining. Great changes have taken place since the early days, when a man wanted but a pick and shovel, tin dish and cradle, to enable him to earn a livelihood on the diggings. The rich shallow gravels have been to all appearances worked out, the ground is getting deeper, the inroads of water more troublesome, and greatly-improved appliances are needed in order to pump the water or wash away the masses of drift that overlie the gold-bearing layers on the bottom.

The difficulty for many years experienced in working the beds of the larger rivers has been at last overcome by the use of dredging machinery. Dredging has not only been adopted for working river-beds, but has also been applied to great advantage on river flats, which cannot be profitably worked by any other means. So successful, indeed, has this method proved, that it seems to be developing into a very considerable branch of the mining industry.

So numerous are rapid streams and rivers in New Zealand that water is easily available for supplying direct motive-power for all kinds of mining machinery, as well as for the generation and transmission of electric energy where the water-supply is distant from the scene of operations. It has been used at Skipper's for

years to generate electricity by means of dynamos, the current being transmitted a distance of several miles over a high range for the purpose of driving a crushing battery. Great improvements have been made in the appliances since the method was first adopted, and at present some 67 per cent. of the power required to generate electricity is obtained in this way.

Skipper's was the first place in New Zealand, if not in the world, where electricity was used to drive a crushing battery; and it is now used at the Premier Mine, Macetown, on the Arrow River, for mine haulage. Electricity has been adopted with equal success at the Brunner coal-mines, near Greymouth, for working the haulage and pumping machinery. It is also used for mining purposes at the Westport Coal Company's mines.

The total number of gold-miners employed in 1899–1900 was 13,502 as against 13,291 for the previous year. In some places, more especially in Otago, Nelson, and the West Coast, many of the miners do not depend entirely on mining, but employ a part of their time in farming and other pursuits.

The total quantity of gold entered for export during the years ending 31st March, 1900, and 31st March, 1901, for the several districts, and the total quantity and value of the gold exported from the colony from the 1st January, 1857, to the 31st March, 1901, are shown hereunder; but this does not necessarily include the whole of the gold produced, as no doubt much has been taken out of the colony from time to time by people who have evaded the duty, and a good deal has been used for making jewellery and ornaments:—

TABLE SHOWING THE QUANTITY AND VALUE OF GOLD ENTERED FOR EXPORTATION FROM NEW ZEALAND FOR THE YEARS ENDED THE 31ST MARCH, 1900 AND 1901, AND THE TOTAL QUANTITY AND VALUE FROM JANUARY, 1857, TO 31ST MARCH, 1901.

District.	Year ending 31st March, 1900.		Year ending 31st March, 1901.		Increase for Year ending 31st March, 1901.	Total Quantity and Value from January, 1857, to 31st March, 1901.	
	Quantity.	Value.	Quantity.	Value.			
	Oz.	£	Oz.	£	Oz.	Oz.	£
Auckland ..	168,836	625,207	166,049	604,018	*2,787	2,650,443	9,944,954
Wellington ..	..	..	..	..	..	188	706
Marlborough	344	1,382	247	970	*97	86,822	338,190
Nelson ..	2,589	10,251	5,126	19,238	2,537	263,155	1,038,377
West Coast ..	94,081	376,076	85,779	343,728	*8,302	5,999,030	23,849,796
Canterbury ..	22	87	22	84	..	104	412
Otago ..	126,791	513,341	135,753	548,444	8,962	5,724,442	22,683,765
Totals ..	392,663	1,526,344	392,976	1,516,482	313	14,724,184	57,856,200

* Decrease.

It will be seen from the above table that there was last year

an increase in the yield of gold of 313 oz. on the figures for the preceding twelve months.

Of the total quantity of gold entered for exportation last year Auckland contributed 42·25 per cent.; Marlborough, 0·06 per cent.; Nelson, 1·30 per cent.; West Coast, 21·83 per cent.; Canterbury, 0.01 per cent.; and Otago, 34·55 per cent.

Production of Australasian Goldfields.

The gold yield of the Australasian Colonies for 1896, 1897, 1898, and 1899 was as under:—

	1896. Oz.	1897. Oz.	1898. Oz.	1899. Oz.
Queensland ..	640,385	796,835	920,048	946,894
New South Wales ..	296,072	292,217	340,493	496,196
Victoria	805,087	812,765	837,257	854,500
South Australia ..	29,004	10,322	31,961	23,122
Western Australia ..	281,265	675,082	1,050,184	1,643,877
Tasmania	62,591	60,735	74,233	83,992
New Zealand ..	263,722	251,645	280,175	389,558
	2,378,126	2,899,651	3,534,351	4,438,139

The increase for the period is 2,060,013 oz. The mint value of Australasian gold averages £3 16s. per ounce, and a comparison of value is therefore as follows: 1896, £9,036,879; 1897, £11,018,674; 1898, £13,430,533; 1899, £16,864,927: increase, 1896 to 1899, £7,828,048.

The Cyanide Process.

On the Hauraki Goldfields gold is often found either in so finely divided a form that the ordinary methods of amalgamation fail to recover a payable percentage, or it is associated with, or entangled in, base metallic minerals which necessitate the adoption of scientific, and often costly, methods of treatment. In these goldfields the successful use of the cyanide process is steadily extending, with the result that many ores that formerly were worked at a loss by amalgamation processes now yield regular returns on the capital invested.

Indeed, the cyanide process is the most noteworthy improvement as yet introduced in the treatment of gold- and silver-bearing ores. It is particularly suitable where the gold is found in the ore in fine particles; whereas, if the gold be at all coarse, cyanide will do no more than cleanse and brighten its surface and render it fitter for amalgamation. In a paper on "Cyaniding in New Zealand," Mr. James Park, F.G.S., comments on the treatment of these ores:—

Dry Crushing.

Prior to the introduction of the cyanide process the ores were treated by dry crushing and hot pan amalgamation with chemicals, by which a recovery of 65 per cent. was effected.

When cyanide treatment was adopted, dry crushing was naturally continued at the different mills, the dry pulverised material being charged into shallow vats and treated directly with cyanide. From 65 per cent. by pan amalgamation the recovery rose at a bound to 85, and in some cases to 90 per cent., and the results were so satisfactory that no further improvement was considered possible.

In a few years, however, it became apparent that dry crushing possessed many disadvantages as compared with wet crushing, the principal ones being the cost of the preliminary drying of the ore, the low duty of the stamps, and the large number of vats required for leaching. In 1897 mine-owners began to turn their attention to wet crushing, and one by one, since the beginning of 1898, the different mills have been adopting wet crushing, until at the present time dry crushing is the exception, and not, as it was *three* years ago, the rule.

Wet Crushing.

I. For ores containing a large proportion of free, easily amalgamable gold, with a certain proportion of fine or "float" gold, and silver-sulphide, the mill practice is:—

(*a.*) Crushing with water.
(*b.*) Plate amalgamation.
(*c.*) *Spitzlutte* separation of sands and slimes.
(*d.*) Cyanide treatment of sands and slimes by ordinary percolation.

A typical example of an ore of this class is that of the Kauri Gold Estates, at Opitonui, where a new forty-stamp mill has just started. The sands and heavy slimes are subjected to the "double" cyanide treatment; but it is doubtful if the additional saving will pay for the extra labour involved. So far no provision has been made for the treatment of the fine slimes. If they are worth it, they will probably be treated by agitation and decanting.

II. For a clean ore, almost identical with that described above, but containing a small proportion of free amalgamable gold and a large proportion of fine cyaniding gold, with little or no slimes, the method of treatment at the Crown Mines is:—

(*a.*) Crushing with cyanide solution.
(*b.*) Direct cyanide treatment of mixed sands and slimes by percolation.
(*c.*) Plate amalgamation of free gold.

With an ore exceptionally free from slimes, it seems that the order of treatment could be reversed with advantage as regards both stamp duty and efficiency of amalgamation on the plates.

III. For ores containing some easily amalgamable gold, and fine gold associated with pyrites and silver-sulphides, the treatment used is:—

(*a.*) Crushing with water.
(*b.*) Plate amalgamation.
(*c.*) *Spitzlutte* separation of fine slimes, if necessary.
(*d.*) Vanner concentration of sulphurets.
(*e.*) Cyanide treatment of sands by percolation.
(*f.*) Cyanide treatment of sands by agitation and decanting.
(*g.*) Cyanide treatment of concentrates by agitation.

The practice at the Woodstock mill is a typical example of this system, the details being as follows: The ore is chalcedonic and finely crystalline quartz, containing a small proportion of clayey matter and a little pyrites. It is stained a greyish- and blackish-brown colour through the presence of iron and manganese oxides.

IV. For very slimy ores, containing very little easily amalgamable gold and a large proportion of extremely fine gold, besides the usual silver-sulphides, the treatment is as follows:—

(*a.*) Crushing with cyanide solution.
(*b.*) *Spitzlutte* separation of sands and slimes.
(*c.*) Treatment of sands by percolation.
(*d.*) Treatment of slimes by agitation and decanting.

This method of treatment is subject to various modifications as regards mechanical appliances and methods of application, but the general principles are the same everywhere.

By a statute passed in December, 1897, and termed "The Cyanide Process Gold-extraction Act, 1897," an agreement was approved by Parliament under which the Government arranged to purchase the patent rights in New Zealand of the Gassel Gold-extracting Company, thus rendering the said patent rights available for mining purposes at reasonable rates of royalty. The process used under the patent is what is commonly known as the cyanide process, and the operation of the Act should prove highly important in the development of low-grade ores, and otherwise promote the mining industry. The royalties received by the Government up to the 31st March, 1901, amounted to £4,253 1s. 10d.

Quartz and Alluvial Workings.

The working of quartz mines and deep alluvial drifts necessitates a large outlay of money before returns can be expected, and can only be undertaken when capital is available. In the case of quartz mines, they must be sufficiently opened up to ascertain the value and extent of the reefs preparatory to the erection of reduction machinery, which must be constructed on the most modern principles to insure efficiency and economy in the handling and treatment of large bodies of ore.

The introduction of capital has the effect of enabling the claims not only to be opened up at greater depths than heretofore, but they will also be worked in a more systematic and economical manner. Modern machinery and appliances are introduced and erected for the reduction and treatment of the ores, and it is expected that a far larger percentage of the gold will be recovered than has been the case in the past.

The improved appliances introduced in dredging and hydraulic elevating and sluicing machinery have made it possible to work with profit alluvial ground and drifts that a few years ago could not be handled remuneratively.

In the successful development of alluvial drifts containing only a few grains of gold to the ton or cubic yard, a large and constant supply of water is of primary importance, and to secure this the construction of expensive races must be undertaken as the initial step towards systematic working.

In the colony there are large areas covered with auriferous drifts which will prove remunerative if a sufficient quantity of water can be obtained to work them on an extensive scale; and the number of men who can be profitably employed in alluvial workings will necessarily be in proportion to the quantity of water available.

COAL-MINING.

The extent of the coal-measures in New Zealand will make coal-mining one of the large industries in the colony, especially on the west coast of the Middle Island, where bituminous coal exists equal, if not superior, in quality to coal of the same class in any part of the world.

The progressive increase in the output of coal from 1878 to the end of 1900 is shown below:—

Year.	Raised in the Colony.		Imported.	Total raised in the Colony, and imported, per Annum.	Exported (excluding Coal for Fuel by Ocean Steamers).	Total Consumption of Coal within the Colony.	Yearly increase in Consumption within the Colony.
	Total.	Yearly Increase.					
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1878 ..	162,218	..	174,148	336,366	3,921	332,445	..
1879 ..	231,218	69,000	158,076	389,294	7,195	382,099	49,654
1880 ..	299,923	68,705	123,298	423,221	7,021	416,200	34,101
1881 ..	337,262	37,339	129,962	467,224	6,626	460,598	44,398
1882 ..	378,272	41,010	129,582	507,854	4,245	503,609	43,011
1883 ..	421,764	43,492	123,540	545,304	7,172	538,132	34,523
1884 ..	480,831	59,067	148,444	629,275	6,354	622,921	84,789
1885 ..	511,063	30,232	130,202	641,265	2,371	638,894	15,973
1886 ..	534,353	23,290	119,873	654,226	2,862	651,364	12,470
1887 ..	558,620	24,267	107,230	665,850	12,951	652,899	1,535
1888 ..	613,895	55,275	101,341	715,236	27,678	687,558	34,659
1889 ..	586,445	-27,450*	128,063	714,508	39,290	675,218	12,340
1890 ..	637,397	50,952	110,939	748,336	33,404	714,932	39,714
1891 ..	668,794	31,397	125,318	794,112	29,093	764,019	49,087
1892 ..	673,315	4,521	125,453	798,768	28,169	770,599	6,580
1893 ..	691,548	18,233	117,444	808,992	24,288	784,704	14,105
1894 ..	719,546	27,998	112,961	832,507	25,449	807,058	22,354
1895 ..	726,654	7,108	108,198	834,852	26,151	808,701	1,643
1896 ..	792,851	66,197	101,756	894,607	27,974	866,633	57,932
1897 ..	840,713	47,862	110,907	951,620	26,639	924,981	58,348
1898 ..	907,033	66,320	115,427	1,022,460	18,348	1,004,112	79,131
1899 ..	975,234	68,201	99,655	1,074,889	14,146	1,060,743	56,631
1900 ..	1,093,990	118,756	124,033	1,218,023	36,699	1,181,324	120,581

* Decrease.

It will be seen from the above that, with the exception of 1889, there has been a steady increase in the output of coal from the mines in the colony, year after year, since records have been kept by the Mines Department. The yearly increase in output is principally due to the growing demand for consumption within the colony. During a period of twenty-three years the annual consumption of coal in New Zealand has increased to the extent of 848,879 tons, showing that new industries are quickly springing up, requiring fuel for generating motive-power.

The total output from the mines last year was 1,093,990 tons, as against 975,234 tons for 1899, an increase of 118,756 tons. The coal imported from other countries was 124,033 tons, against

99,655 tons in 1899, an increase in the importation last year of 24,378 tons. The imports were 124,011 tons from New South Wales, 20 tons from Tasmania, and 2 tons from the United Kingdom. The total export of coal was 114,358 tons, of which 112,707 tons were colonial produce, and 1,651 tons imported coal from other countries. Of the coal exported, 77,659 tons were for coaling direct steamers trading between the colony and the United Kingdom, and has been treated as coal consumed within the colony, these steamers trading wholly between New Zealand and Great Britain. Taking, therefore, the output from the mines and the coal imported, there is a total of 1,218,023 tons, of which 36,699 tons were exported, leaving the consumption within the colony last year 1,181,324 tons, as against 1,060,743 tons for 1899, an increased consumption of 120,581 tons.

The largest increase in the output last year was in the Greymouth district—namely, 53,272 tons. There was also an increased production from the mines in the Westport district of 17,103 tons, in the Otago District of 16,389 tons, in the Southland district of 10,986 tons, in the Whangarei, Kamo, Ngunguru, and Whauwhau district of 10,677 tons, in the Waikato district of 8,262 tons, in the Kawakawa and Hikurangi district of 1,679 tons, in the West Wanganui district of 1,499 tons, and from the Reefton district of 362 tons; but there was a decline in the Mokau district of 1,443 tons, and in the Malvern district of 30 tons.

The quantities of coal produced in each district are as under:—

Name of District.	Output of Coal.		Increase or Decrease.	Approximate total Output of Coal up to the 31st December, 1900.
	1900.	1899.		
	Tons.	Tons.	Tons.	Tons.
Kawakawa and Hikurangi ..	53,340	51,661	+ 1,679	1,136,520
Whangarei, Kamo, Ngunguru, and Whauwhau	26,339	15,662	+10,677	433,862
Waikato	77,191	68,929	+ 8,262	1,167,168
Mokau	3,433	4,876	− 1,443	26,021
Pelorus	..	..	..	711
West Wanganui	1,739	240	+ 1,499	52,975
Westport	380,146	363,043	+17,103	3,726,493
Reefton	4,379	4,017	+ 362	84,144
Greymouth	207,919	154,647	+53,272	2,877,120
Malvern	14,162	14,192	− 30	383,386
Timaru	..	..	..	10,657
Otago	266,213	249,824	+16,389	4,073,337
Southland	59,129	48,143	+10,986	580,476
Totals	1,093,990	975,234	+118,756	14,552,870

The following table, constructed from "Laboratory Reports of the Geological Survey" (Sir J. Hector) gives the composition of samples of New Zealand coals freshly taken from the principal mines:—

Number.	Description.	Locality.	Analysis.				Evaporative Power.*	
			Fixed Carbon.	Hydrocarbon.	Water.	Ash.	1.	2.
1	Anthracite ..	Acheron, Canterbury ..	84·12	1·96	1·80	12·12	10·93	18·50
2	Bituminous ..	Coalbrookdale ..	74·83	20·50	1·16	3·51	9·70	16·45
3	" ..	"	70·00	22·15	2·52	5·33	9·10	15·40
4	" ..	Banbury	69·97	25·71	0·99	3·33	9·09	15·38
5	Altered brown coal	Malvern Hills ..	68·54	19·89	4·15	7·42	8·27	12·50
6	Bituminous ..	Tyneside	65·59	29·18	0·82	4·41	8·52	13·55
7	Glance coal ..	Rakaia Gorge ..	64·51	21·27	6·76	7·46	8 30	13·20
8	Bituminous ..	Wallsend	62·87	31·64	1·66	3·83	8·17	13·82
9	" ..	Grey River	62·37	29·44	1·99	6·20	8·01	13·22
10	Pitch coal ..	Kawakawa	61·16	28·00	2·51	8·33	7·95	12·55
11	Bituminous ..	Preservation Inlet ..	60·88	28·60	4·33	6·19	7·91	12·80
12	Pitch coal ..	Blackball, Grey River	60·20	29·97	8·01	1·82	7·82	12·20
13	Bituminous ..	Mokihinui	59·75	32·14	3·97	4·14	7·76	11·80
14	" ..	Coalpit Heath ..	58·81	38·98	1·02	1·19	7·64	12·96
15	" ..	Mokihinui	57·92	34·94	3·96	3·18	7·50	12·75
16	" ..	Brunner Mine ..	56·62	35·68	1·59	6·11	7·36	12 46
17	" ..	" ..	56·21	37·73	1·50	4·56	7·30	12·36
18	" ..	Westport	56·01	37·17	2·60	4·22	7·28	12·30
19	" ..	Mokihinui	55·59	38·86	3·16	2·39	7·20	12·22
20	" ..	Brunner	54·16	35·85	2 50	7·49	7·04	11·91
21	Altered brown coal	Malvern Hills ..	53·29	32·04	12·65	2·02	6·92	11·50
22	Bituminous ..	Wallsend	53·10	35·47	1·41	10·02	6·90	11·68
23	" ..	Otamataura Creek ..	52·89	36·63	2·19	8·29	6·90	11·70
24	" ..	Near Cape Farewell ..	51·37	38·72	4·38	5·53	6·31	11·60
25	Pitch coal ..	Kawakawa	50·15	42·63	4·18	3·04	6·50	11·80
26	Glance coal ..	Whangarei	50·11	38·68	8·01	3·20	6·50	11·75
27	Pitch coal ..	Kamo	50 01	37·69	9·61	2·69	6·50	11·17
28	Brown coal ..	Malvern Hills ..	49·99	35·42	11·79	2·80	6·49	10·90
29	"	Fernhill	49·95	36·95	12·00	1·10	6·49	10·99
30	" ..	Allandale	47·31	34·26	12·41	6 02	6·15	10 96
31	" ..	Kaitangata	46·48	33·48	14·66	5·38	6·04	10·22
32	" ..	Shag Point	46·21	32·65	16 02	5·12	6·00	10·16
33	" ..	Homebush	44·92	36 00	15·83	3 25	5·83	9·87
34	Pitch coal ..	Hikurangi, Whangarei	44·50	47·00	5·99	2·51	5·78	9·79
35	Brown coal ..	Hokonui	44·28	38·22	16·50	1·00	5·75	9·77
36	" ..	Kaitangata	44·11	38·32	15·44	2·13	5·74	9·96
37	" ..	Nightcaps	43·62	33·68	18·33	4·37	5.67	9·59
38	Pitch coal ..	Shag Point	43·19	30·05	15·82	10·94	5·61	9·52
39	Brown coal ..	Springfield	42·68	33·66	18·65	5·01	5 55	9·38
40	" ..	Orepuki	42·64	36·26	14·44	6·66	5·54	9·38
41	" ..	Kaitangata	38·29	32·43	17·50	11·78	4·87	8·32
42	" ..	Shag Point	35·76	30·86	13·22	20·16	4·64	7·85
43	" ..	Allandale	34·72	41·43	18·99	4·86	4·51	7·63
44	Pitch coal ..	Grey River	34·72	56·48	6·20	2·60	4·51	7·63
		FOR COMPARISON.						
	Newcastle, N.S.W.	Best	58·33	34·17	1·83	5·67	7·50	12·82
	"	Worst	53·34	26·66	3·33	16·67	6·90	11 72

*The second column headed "Evaporative Power" is obtained by the use of a multiple computed from the results of Professor Liversedge's experiments upon the coals of New South Wales. The multiple used for the first column is the one which has long been generally used for computing the evaporative power of coals; but, to prevent any unfair and prejudicial comparison of our coals with those of New South Wales, the second column is given.

As regards the quality of the coal, it cannot be surpassed. The late Sir John Coode, in his presidential address to the Institute of Civil Engineers, London, stated: "The bituminous coal found on the west coast of the Middle Island is declared by engineers to be fully equal, if not superior, to the best description from any part of the world."

The quantity of each class of coal produced in 1899 and 1900 was:—

Class of Coal.	Output of Coal.		Increase.	Approximate total Output of Coal up to the 31st December, 1900.
	1899.	1900.		
	Tons.	Tons.	Tons.	Tons.
Bituminous	588,036	673,862	85,826	7,946,824
Pitch	37,835	37,804	31*	1,798,127
Brown	314,542	339,786	25,244	4,318,947
Lignite	34,821	42,538	7,717	488,972
Totals	975,234	1,093,990	118,756	14,552,870

* Decrease.

It has been computed that to deliver coal at the pit-mouth costs in labour 6s. a ton. The number of persons employed in all the coal-mines last year was 2,460, and the output of coal, 1,093,990 tons: the average earning for each person would thus be £133 8s. 3d. per annum, or about £2 11s. 4d. per week.

Other Metals or Minerals.

Very little has been done in the colony to prospect and develop mines other than for gold and silver. The only exports last year of metalliferous products, excluding gold and silver, were 166 tons of manganese-ore, 1,692 tons of sulphur, and small parcels of other minerals, representing an aggregate value of £13,595.

Kauri-gum.

The quantity of kauri-gum exported last year was 10,159 tons, as against 11,116 tons for 1899. Last year's produce (£622,293) gave an average value of about £61 5s. 2d. per ton, while for 1899 the average was £54 13s. 9d. per ton.

SECTION XVI.—GOVERNMENT VALUATION OF LAND AND ITS IMPROVEMENTS.

Results of the General Valuation made for March, 1898.

In the year 1896 an Act intituled the Government Valuation of Land Act was passed, providing for the appointment of a Valuer-General, and for the periodical valuation of all land in the colony. The Valuer-General is the Commissioner of Taxes for the time being. The valuations on the general roll are used for the assessment of land-tax, stamp duties, and duties on deceased persons' estates; for local rates, except in places where these are levied on the annual value; also, for the purposes of advances and investments on mortgage of land by the Post Office, Government Insurance Department, Public Trust Office, Government Advances to Settlers Office, and the Commissioners of the Public Debts Sinking Funds. The valuation is also used for the guidance of the Government in transactions under "The Land for Settlements Act, 1894," and "The Public Works Act, 1894."

The term "land" means and includes all lands, tenements, buildings, and hereditaments, whether corporeal or incorporeal, and also includes all chattel interests in land.

A certified copy of any entry in the general valuation-roll is supplied by the department on payment of the prescribed fee.

The general valuation-roll continues in force until a fresh roll is made, but whilst in force it may be altered and amended from time to time. The rolls for rating purposes are supplied to local bodies by the Valuer-General on the request of the local authority. The aim is to insure a standard valuation for taxation, local rating, and loan purposes.

Owners and occupiers dissatisfied with their valuations have the right of objection, the procedure being that laid down by "The Rating Act, 1894," and the regulations under "The Government Valuation of Land Act, 1896."

The cost of making the valuation is divided proportionally between the departments mostly using it and the local authorities, while separate fees are provided for by regulation for supplying individual valuations to persons requiring them.

The general valuation-roll shows the capital value of the property, of improvements, and the unimproved value of the land.

The surface-value only of gold mines is included, and the value of the Government railways has been excluded.

All land is included, whether occupied or unoccupied, whether owned by private individuals, by the Crown, by Natives, by local authorities, Education Boards, School Commissioners, Churches, corporations, companies, or societies of all kinds, and whether subject to or exempt from taxation or rates.

The work of valuing all the lands in the colony is very great, and the Valuer-General points out that some idea of its magnitude may be gathered from the fact that 231,965 separate valuations were needed, of which 119,258 were in the North Island, and 112,707 in the South.

The result of the valuation of land as in March, 1898, is given in the report of the Valuer-General, presented to both Houses of Parliament. Comparative figures are here given for 1891 and 1898 of the results of the assessments made in those years, and the increase, stating separately the unimproved value and the value of improvements.

COMPARISON OF CAPITAL VALUES, 1891 AND 1898.†

	1891. £	1898. £	Increase, 1891 to 1898. £
Unimproved value ..	75,787,895	84,401,244	8,613,349
Value of improvements	46,365,297	54,190,103	7,824,806
Total ..	122,225,029*	138,591,347†	16,366,318*

* In several cases the unimproved value, together with the value of improvements, does not equal the improved value. This is chiefly owing to alterations made by Boards of Review.

In the figures for the North and South Islands the relative degree of increase is exhibited, and the rapid rate of progress in the North Island shows in strong contrast to that of the other Island. There has been great spread of settlement in the Wellington and Taranaki Districts.

CAPITAL VALUES.†

	1891. £	1898. £	Increase. £
North Island ..	57,441,115	71,680,952	14,239,837
South Island ..	64,783,914	66,910,395	2,126,481
Totals ..	122,225,029	138,591,347†	16,366,318

The increase for the North Island of £14,239,837 represents an advance of 24·79 per cent. on the value in 1891, and that of £2,126,481, for the South Island, 3·28 per cent. The increase for the whole colony, as shown previously, was £16,366,318, or 13·39 per cent.

The following statement gives the capital value of land and improvements in counties and boroughs as at the assessments of 1891 and 1898.

CAPITAL VALUE OF LAND AND IMPROVEMENTS IN COUNTIES AND BOROUGHS.

	1891. £	1898. £
Counties	85,818,167	95,710,266
Boroughs	36,406,862	42,881,081
Totals	122,225,029	138,591,347

† A revision of land values now in progress (year 1901) shows, so far as completed, a *net* increase of capital value amounting to £8,390,000. It is anticipated that a sum of twelve millions more will be added.

The increase in the capital value of land, with improvements, in counties for the seven years is £9,892,099, or 11·53 per cent., while that for boroughs is £6,474,219, or 17·78 per cent.; but the value of property in boroughs was added to between 1891 and 1898 by the constitution of eight new boroughs, and that of the counties correspondingly reduced, so that the actual rate of increase in the value of country lands is higher than indicated by the above figures, and in urban lands considerably less.

Comparisons are given in detail in the tables which follow. For still fuller information, including particulars of road and town districts, besides ridings of counties, reference must be made to the Statistical volume of 1899.

Counties, 1891 and 1898.

Table showing the Capital Value of Land and Improvements in each County in New Zealand according to the results of the General Valuations made in 1891 and 1898:—

County.	1891. £	1898. £
Mongonui	196,158	213,214
Whangaroa	63,825	77,107
Bay of Islands	365,069	354,354
Hokianga	422,365	411,808
Whangarei	523,420	554,905[a]
Hobson	325,974	374,443
Otamatea	258,496	303,113
Rodney	293,235	305,677
Waitemata	632,012	644,552
Eden	2,002,677	2,249,575
Manukau	1,385,330	1,513,178
Islands { Great and Little Barrier	55,284	64,994
Islands { Waiheke, &c.	71,343	84,017
Waikato	682,774	624,102
Raglan	357,941	437,962
Waipa	464,086	493,786
Kawhia	354,269	383,131
Coromandel	217,120	380,232
Thames	253,013	364,135
Ohinemuri	204,704	512,330
Tauranga	282,723	335,864
Piako	689,384	713,963[b]
Rotorua	168,371	468,015
Whakatane	663,785	733,027
East Taupo	301,681	252,681
West Taupo	235,997	237,482
Islands (Mayor and Motiti)	*	5,780
Waiapu	472,548	732,232
Cook	1,885,856	2,569,400
Wairoa	1,101,072	1,040,618
Hawke's Bay	3,673,889	3,541,602
Waipawa	2,179,812	2,594,187[c]
Patangata	1,863,936	1,837,598
Clifton	441,325	624,295
Taranaki	969,579	1,534,634
Stratford	560,345	992,931

* No valuation made. (a) Exclusive of Borough of Whangarei, which in 1891 formed part of county. (b) Exclusive of Borough of Te Aroha, which in 1891 formed part of county. (c) Exclusive of Borough of Dannevirke, which in 1891 formed part of county.

COUNTIES—*continued.*

County.	1891. £	1898. £
Hawera	1,247,436	1,888,624
Patea	823,675	1,081,957
Waitotara	731,668	914,206
Wanganui	1,176,106	1,704,226
Rangitikei	1,475,473	1,960,707
Kiwitea	*	756,059
Pohangina	*	397,194
Manawatu	810,171	950,957
Oroua	2,268,854	1,908,338‡
Horowhenua	858,648	1,147,850
Islands (Kapiti and Mana)	†	10,484
Pahiatua	511,400	902,481[a]
Wairarapa North	1,831,209	2,631,730
Wairarapa South	1,872,035	2,348,804
Hutt	1,030,745	1,272,436
Collingwood	323,910	360,119
Waimea	1,196,226	1,338,280
Sounds	171,095	276,735
Marlborough	1,837,632	1,814,285
Buller	651,129	673,391
Inangahua	874,948	946,174
Grey	861,890	817,957
Westland	1,048,156	792,807
Kaikoura	350,521	358,045
Cheviot	486,765	573,324
Amuri	921,221	688,106
Ashley	3,801,341	3,853,094
Selwyn	7,446,756	7,312,308[b]
Akaroa	1,169,379	1,190,101
Ashburton	3,630,383	4,006,292
Geraldine	3,257,696	1,839,474
Levels	‡	1,493,135
Mackenzie	736,021	799,755
Waimate	2,462,433	2,403,822
Waitaki	2,709,379	2,540,880
Maniototo	449,650	553,766
Waihemo	417,887	409,062
Waikouaiti	602,015	587,814
Peninsula	414,146	417,251
Taieri	1,330,718	1,282,724
Tuapeka	938,701	833,968
Bruce	957,438	944,168
Clutha	1,151,046	1,175,618
Vincent	791,595	437,987
Lake	382,722	318,564
Fiord	†	143,584
Wallace	1,364,016	1,656,864
Southland	3,739,513	4,251,275[c]
Stewart Island	85,021	159,690
Islands Antipodes, &c.	†	13,875
Islands Chatham	†	†
Totals	85,818,167	95,710,266

* Kiwitea and Pohangina included in Oroua County for 1891. † No valuation made. ‡ Included in Geraldine. [a] Exclusive of Borough of Pahiatua, which in 1891 formed part of county. [b] Exclusive of Boroughs of Linwood, Woolston, and New Brighton, which in 1891 formed part of county. [c] Exclusive of Borough of Mataura, which in 1891 formed part of county.

Boroughs, 1891 and 1898.

Table showing the Capital Value of Land and Improvements in each Borough in New Zealand, according to the results of the General Valuations made in 1891 and 1898.—

Borough.	1891. £	1898. £
Whangarei	*	90,000
Birkenhead	77,532	94,185
Devonport	407,333	471,867
Auckland	4,934,288	5,676,695
Parnell	366,098	399,480
Newmarket	182,353	175,657
Newton	222,355	262,946
Onehunga	250,634	267,123
Hamilton	90,142	118,267
Cambridge	70,279	79,519
Thames	227,171	294,695
Tauranga	63,026	87,301
Te Aroha	†	56,925
Gisborne	317,989	305,763
Napier	1,275,853	1,263,227
Hastings	372,458	497,862
Dannevirke	‡	147,339
Woodville	102,226	98,474
New Plymouth	341,117	572,216
Hawera	84,834	220,115
Patea	43,378	63,626
Wanganui	543,403	813,205
Marton	83,915	112,075
Feilding	146,884	233,367
Palmerston North	489,618	631,796
Foxton	85,743	100,051
Onslow	144,053	202,971
Karori	118,728	161,936
Wellington	5,865,778	8,052,512
Melrose	203,517	314,002
Pahiatua	§	112,239
Masterton	356,860	472,291
Carterton	88,650	111,106
Greytown	115,649	130,036
Lower Hutt	244,075	269,821
Petone	268,358	283,285
Richmond	84,285	85,380
Nelson	942,370	833,562
Picton	88,195	74,833
Blenheim	378,943	334,990
Westport	166,987	189,916
Greymouth	299,077	335,689
Brunner	115,892	69,661(a)
Kumara	33,565	36,721
Hokitika	102,708	150,091
Ross	16,961	29,442
Rangiora	158,017	175,292
Kaiapoi	134,055	154,281
St. Albans	524,822	611,154
Christchurch	3,403,566	3,364,921
Sydenham	821,060	770,059(b)

* Formed part of Whangarei County. † Formed part of Piako County. ‡ Formed part of Waipawa County. § Formed part of Pahiatua County. (a) Value of coal-mines omitted from roll. (b) Value of railway-station, £80,000, included in 1891, excluded in 1898.

BOROUGHS—*continued.*

Borough.	1891. £	1898. £
Linwood	*	445,210
Woolston	*	193,425
New Brighton	*	94,719
Sumner	102,145	114,143
Lyttelton	851,730	841,719
Akaroa	49,407	50,968
Ashburton	223,091	244,027
Timaru	442,830	539,659
Waimate	75,399	93,699
Oamaru	612,571	437,089
Hampden	13,195	15,721
Naseby	24,186	30,075
Palmerston	51,182	43,747
Hawksbury	45,716	47,354
Port Chalmers	200,043	220,291
West Harbour	137,015	133,269
North-East Valley	276,835	256,458
Maori Hill	142,890	173,027
Roslyn	360,962	481,554
Mornington	284,875	301,107
Dunedin	4,193,422	4,339,744
Caversham	466,074	466,845
South Dunedin	223,534	296,619
St. Kilda	118,477	130,573
Green Island	36,962	39,154
Mosgiel	122,625	119,466
Roxburgh	20,123	26,836
Lawrence	79,066	89,245
Tapanui	16,155	16,463
Milton	76,207	109,273
Balclutha	53,210	70,287
Kaitangata	54,976	59,958
Arrowtown	24,586	26,547
Queenstown	65,153	66,261
Cromwell	22,168	34,818
Alexandra	13,578	31,089
Gore	142,708	172,932
Mataura	†	83,481
Winton	20,195	29,331
Gladstone	26,541	34,057
Avenal	15,269	23,488
North Invercargill	28,293	40,990
East Invercargill	42,996	52,487
Invercargill	959,140	982,482
South Invercargill	79,526	97,249
Riverton	59,626	58,566
Campbelltown	97,380	165,412
Total of Boroughs	36,406,862	42,881,081

* Formed part of Selwyn County. † Formed part of Southland County.

SECTION XVII.—POPULATION.

[The progress of the colony from the beginning is shown in the statistical broadsheets which follow the General Index.]

THE population of New Zealand, as estimated (prior to the census of 1901) for the 31st December, 1900, with the increase for the year, is shown below :—

	Persons.	Males.	Females.
Estimated population (exclusive of Maoris) on 31st December, 1899	756,505	398,679	357,826
Increase during year 1900 :—			
By excess of births over deaths	12,346	5,954	6,392
Excess of arrivals over departures	1,831	923	908
Estimated population, exclusive of Maoris, on 31st December, 1900	770,682	405,556	365,126
Maori population (1896)	39,854	21,673	18,181
Total estimated population of Colony on 31st December, 1900	810,536	427,229	383,307

The number of the Chinese in New Zealand at the end of the year 1900 was estimated to be 3,077 persons, of whom 34 were females.

INCREASE OF POPULATION.

The increase for each quarter of the year 1900 was :—

Increase from:	Total.	Males.	Females.
First Quarter.			
Excess of births over deaths	2,866	1,345	1,521
Excess of departures over arrivals (decrease) ..	−754	−767	+13
	2,112	578	1,534
Second Quarter.			
Excess of births over deaths	3,197	1,604	1,593
Excess of departures over arrivals (decrease) ..	−1,368	−954	−414
	1,829	650	1,179
Third Quarter.			
Excess of births over deaths	3,236	1,533	1,703
Excess of arrivals over departures	511	412	99
	3,747	1,945	1,802
Fourth Quarter.			
Excess of births over deaths	3,047	1,472	1,575
Excess of arrivals over departures	3,442	2,232	1,210
	6,489	3,704	2,785
Year 1900.			
Excess of births over deaths	12,346	5,954	6,392
Excess of arrivals over departures	1,831	923	908
	14,177	6,877	7,300

The movement of population since 1885 is given next. Although the large increase in 1893 by excess of arrivals over departures was not maintainedduring the seven following years, the arrivals in the colony nevertheless exceeded the departures in each of these years, and the total excess of arrivals for the nine-year period 1892–1900 inclusive is found to be 29,156 persons, drawn from other colonies or countries. The number may be somewhat greater than the actual fact, but probably not very much so. Reference to the possible source of error and its degree will be found further on.

Year.	Estimated Population on the 31st December.	Increase during the Year			Centesimal Increase on Population of Previous Year.
		By Excess of Births over Deaths.	By Excess of Arrivals over Departures.*	Net Increase.	
1885	575,172	13,612	−2,744†	10,868	1·93
1886	589,386	13,164			
1887	603,361	12,998			
1888	607,380	13,194	−17,194†	58,886	10·24
1889	616,052	12,685			
1890	625,508	12,284			
1891	634,058	11,755			
1892	650,433	11,417	4,958	16,375	2·58
1893	672,265	11,420	10,412	21,832	3·36
1894	686,128	11,610	2,253	13,863	2·06
1895	698,706‡	11,683	895	12,578	1·83
1896	714,162	12,180	1,472	13,652‡	1·95
1897	729,056	12,142	2,752	14,894	2·09
1898	743,463	11,711	2,696	14,407	1·98
1899	756,505	11,155	1,887	13,042	1·75
1900	770,682	12,346	1,831	14,177	1·87

*Corrected in accordance with census results of 1886, 1891, and 1896. The amount of loss by departures in the period 1886-91, though correct in the aggregate, cannot be allocated with exactness to the respective years. †Loss.

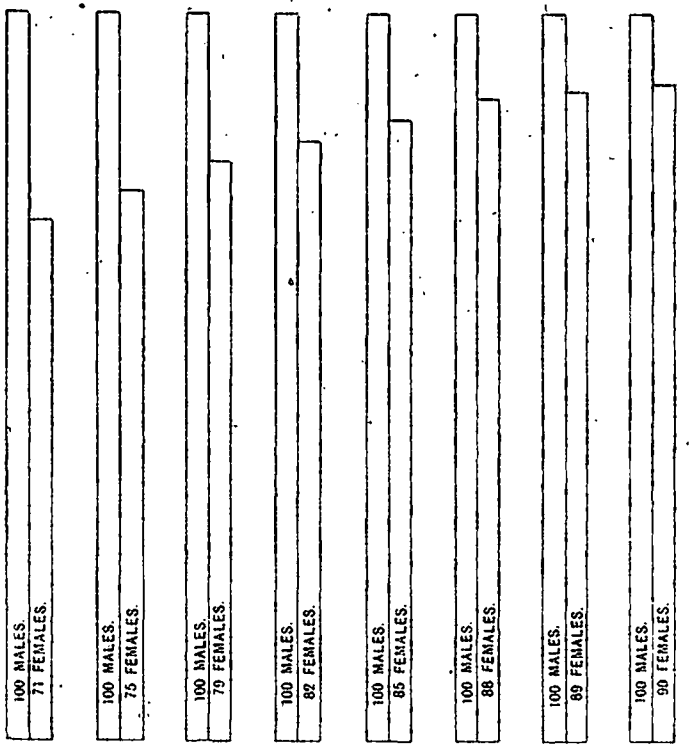
‡ The results of the census taken in April, 1896, disclosed the fact that the estimate of population for December, 1895, was too low by 1,804 persons. Adding this number to the increase for 1896 (13,652 persons) makes 15,456, which is the difference between the populations given for the years 1895 and 1896.

Census, 1901.

The population of the colony (exclusive of Maoris), as returned in the census schedules for the night of the 31st March, 1901, was 772,719 persons, of whom 2,857 were Chinese, and 2,407 half-castes living amongst and as Europeans.

A census of the Maori population was taken during February of 1901, when, according to preliminary returns made by the enumerators, the number of the Native race was found to be 43,101 persons, including 3,123 half-castes living as Maoris. 196 Maori women were returned as married to European husbands. The complete population (European and Maori) of the colony was therefore 815,820 persons, as exhibited in the following statement, specifying the numbers for each sex :—

INCREASE IN THE PROPORTION OF FEMALES TO MALES AT SUCCESSIVE CENSUS PERIODS (EXCLUDING MAORIS).


100 MALES. 71 FEMALES. 1871
100 MALES. 75 FEMALES. 1874
100 MALES. 79 FEMALES. 1878
100 MALES. 82 FEMALES. 1881
100 MALES. 85 FEMALES. 1886
100 MALES. 88 FEMALES. 1891
100 MALES. 89 FEMALES. 1896
100 MALES. 90 FEMALES. 1901

FIGURES TO WHICH THE ABOVE PROPORTIONS RELATE :—

Year	Males.	Females
1871	150,356	106,037
1874	170,981	128,533
1878	230,998	183,414
1881	269,605	220,328
1886	312,221	266,261
1891	332,877	293,781
1896	371,415	331,946
1901	405,992	366,727

The proportion in 1899 of Female to Male population was 90 per cent. The number of female electors who voted at the general election of that year was 74 to every 100 male voters

Population (exclusive of persons of the aboriginal native race, of mixed European and Native blood, and Chinese)	Persons.	Males.	Females.
	767,455	401,979	365,476
Half-castes and persons of mixed race living as and among Europeans	2,407	1,188	1,219
Chinese	2,857	2,825	32
Aboriginal natives (including 196 Maori wives of Europeans)	39,978	21,387	18,591
Half-castes and persons of mixed race living among and as members of Maori tribes	3,123	1,713	1,410
Total population on 31st March, 1901	*815,820	429,092	386,728

The total half-caste or mixed European and Native population was 5,530 persons. The number of half-castes living among Europeans increased since 1896 by 148, or at the rate of 6·55 per cent. In that year the number of Maori wives of Europeans was 229; in 1901 it was 196. The Chinese decreased from 3,711 at the time of the census of 1896 to 2,857 in March, 1901; or at the rate of 23·01 per cent., caused mainly by the excess of departures over arrivals.

The Maori population fell from 41,993 in 1891 to 39,854 in 1896, and increased to 43,101 in 1901, according to the returns.

The increase on the total European population between April, 1896, and 31st March, 1901, amounted to 69,359 persons, or a rate of 9·86 per cent. Between the census of 1891 and that of 1896 the numerical increase was 76,702 persons, or 12·24 per cent. The average annual increase in the period 1896–1901 was at the rate of 1·90 per cent.

The population of the principal divisions of the colony on 31st March, 1901, was—

	Persons.	Males.	Females.
North Island and adjacent islets (exclusive of Maoris)	390,571	206,606	183,965
Middle Island and adjacent islets (exclusive of Maoris)	381,661	199,103	182,558
Stewart Island	272	166	106
Chatham Islands (exclusive of Maoris)	207	112	95
Kermadec Islands	8	5	
Total for the colony (exclusive of Maoris)	772,719	405,992	366,727

Population of the Sexes and Density of Population.

The gradual equalization of the numbers of the sexes and growing density of population and dwellings in the colony are alluded to in a further table.

Date of Enumeration.	Number of Females to 100 Males.	Number of Persons to a Square Mile.	Number of Persons to an Inhabited Dwelling.	Number of Inhabited Dwellings to a Square Mile.
December, 1871	62·16	0·944	4·42	0·214
February, 1874	70·52	2·456	4·48	0·548
April, 1881	81·72	4·693	5·12	0·917
April, 1891	88·26	6·024	5·06	1·191
March, 1901	90·33	7·427	4·86	1·527

* Not including 352 persons, officers and crews of two British men-of-war.

Increase of Population at Successive Censuses.

The increase of population of European descent at successive census periods has been :—

Date of Enumeration.	Population. Persons.	Numerical Increase. Persons.	Centesimal Increase.
December, 1858 ..	59,413		
		39,608	39·99
" 1861 ..	99,021		
		73,137	73·86
" 1864 ..	172,158		
		46,510	27·01
" 1867 ..	218,668		
		37,725	17·25
February, 1871 ..	256,393		
		43,121	16·82
March, 1874 ..	299,514		
		114,898	38·36
" 1878 ..	414,412		
		75,521	18·22
April, 1881 ..	489,933		
		88,549	18·07
March, 1886 ..	578,482		
		48,176	8·33
April, 1891 ..	626,658		
		76,702	12·24
" 1896 ..	703,360		
		69,359	9·86
March, 1901 ..	772,719		

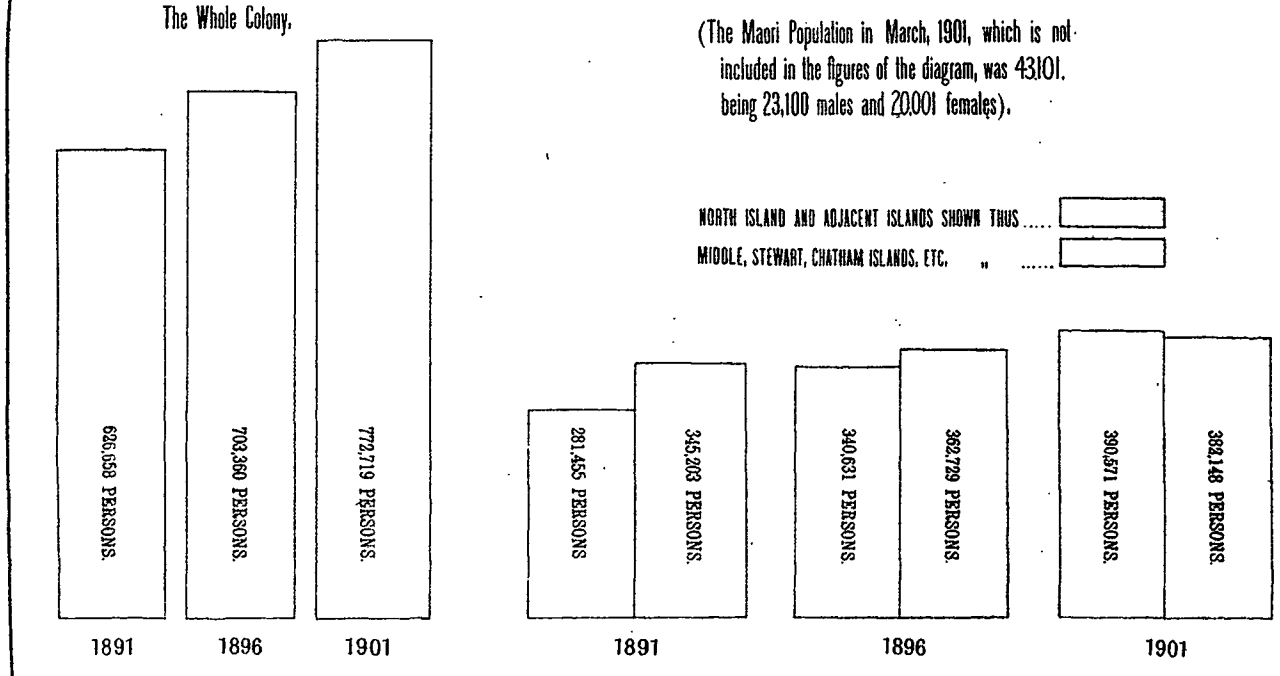
Populations of Provincial Districts.

These are stated as in March, 1901, and at the previous census. Taranaki stands first for rate of progress with an increase of 21·42 per cent. in five years, Wellington comes next with 16 per cent., Auckland third with 14·57, Marlborough and Nelson have increased from 6 to 7 per cent., Canterbury and Otago somewhat over 5 per cent.

Provincial Districts.	Population, April, 1896.	Population, March, 1901.	Increase.	
			Numerical.	Centesimal.
	Persons.	Persons.	Persons.	
Auckland	153,564	175,938	22,374	14·57
Taranaki	31,175	37,855	6,680	21·42
Hawke's Bay ..	34,038	35,424	1,386	4·07
Wellington ..	121,854	141,354	19,500	16·00
Marlborough ..	12,483	13,326	843	6·75
Nelson	35,734	37,915	2,181	6·10
Westland	14,469	14,506	37	0·26
Canterbury ..	135,858	143,041	7,183	5·29
Otago	163,944	173,145	9,201	5·61
Chatham Islands	234	207	−27	−11·54
Kermadec Islands	7	8	1	14·28
Totals ..	703,360	772,719	69,359	9·86

(−) Decrease.

DIAGRAM SHOWING THE MOVEMENT OF EUROPEAN POPULATION FOR THE COLONY, ALSO FOR THE NORTH AND MIDDLE ISLANDS, ETC., SEPARATELY DURING 10 YEARS.



Population of Counties and Boroughs.

New Zealand is, by "The Counties Act, 1876," divided into counties and boroughs, excepting certain outlying islands, which are not within county boundaries. It is provided by the above-mentioned Act that boroughs shall not be included in counties. In March, 1901, the number of the counties was 86. Of these, the North Island had 52, with a population amounting altogether to 216,725 persons. The Middle Island had 33 counties, the population being 200,618 persons. Stewart Island is a county in itself, and had a population of 253 persons, exclusive of persons on shipboard. The names and populations of the various counties in the colony, with their interior boroughs set opposite, were as under at the date of the enumeration:—

Counties.	Census, 1901.	Boroughs.	Census, 1901.
Mangonui	2,274		
On shipboard	18		
Whangaroa	927		
Hokianga	1,767		
On shipboard	22		
Bay of Islands	2,587		
On shipboard	26		
Hobson	4,813		
On shipboard	163		
Whangarei	6,380	Whangarei	1,429
On shipboard	31		
Otamatea	2,721		
Rodney	3,678		
On shipboard	17		
Waitemata	7,035	Birkenhead	1,057
On shipboard	27	Devonport	3,823
		On shipboard	1
Eden	19,314	Grey Lynn	4,110
		Auckland	34,213
		On shipboard	874
		Parnell	4,566
		Newmarket	2,060
		Onehunga	3,015
		On shipboard	47
Manukau	12,306		
Coromandel	4,169		
On shipboard	14		
Thames	5,043	Thames	4,009
On shipboard	8	On shipboard	11
Ohinemuri	9,978		
On shipboard	50		
Piako	3,436	Te Aroha	888
Waikato	3,183	Hamilton	1,253
Waipa	3,580	Cambridge	989
Raglan	1,697		
Kawhia	1,113		
On shipboard	1		
West Taupo	287		
East Taupo	256		
Rotorua	1,307		
Tauranga	1,720	Tauranga	945
		On shipboard	1
Whakatane	779		
Opotiki	1,438		
On shipboard	5		
Waiapu	711		
Cook	6,393	Gisborne	2,737
		On shipboard	58
Wairoa	1,773		
Hawke's Bay	6,833	Napier	8,774
		On shipboard	241
		Hastings	3,650

Counties.	Census, 1901.
Clifton	2,535
Taranaki	11,194
On shipboard	92
Stratford	5,081
Hawera	8,347
Patea	3,046
Waitotara	3,476
Wanganui	4,018
Rangitikei	7,570
Kiwitea	2,844
Oroua	6,778
Pohangina	1,536
Manawatu	3,000
Horowhenua	4,654
Waipawa	9,495
Patangata	2,376
Pahiatua	3,603
Akitio	1,048
Castlepoint	457
Eketahuna	2,332
Mauriceville	1,127
Masterton	3,123
South Wairarapa	5,419
Hutt	7,171
Sounds	946
On shipboard	2
Marlborough	6,518
Kaikoura	1,765
Collingwood	2,490
On shipboard	28
Waimea	7,833
On shipboard	3
Buller	4,868
On shipboard	4
Inangahua	4,595
Grey	4,971
Westland	4,405
Amuri	1,142
Cheviot	1,120
Ashley	11,599
Selwyn	30,787
Akaroa	3,669

Boroughs.	Census, 1901.
New Plymouth...	4,405
Stratford	2,027
Hawera	2,131
Patea	691
Wanganui	7,329
On shipboard	5
Marton	1,101
Feilding...	2,298
Palmerston North	6,534
Foxton	1,211
Dannevirke	2,315
Woodville	926
Pahiatua	1,209
Masterton	3,949
Carterton	1,205
Greytown	1,132
Wellington	43,638
On shipboard	333
Onslow	1,499
Melrose	2,995
Petone	3,780
Lower Hutt	4,822
Karori	1,212
Blenheim	3,222
Picton	875
On shipboard	95
Motueka...	886
Richmond	543
Nelson	7,010
On shipboard...	157
Westport	2,922
On shipboard...	236
Brunner	1,572
Greymouth	3,748
On shipboard	89
Hokitika...	1,946
On shipboard...	5
Kumara	1,121
Ross	614
Kaiapoi	1,795
Rangiora	1,768
Lyttelton	4,028
On shipboard	321
Christchurch...	17,538
New Brighton	1,008
Sydenham	11,404
St. Albans	6,607
Linwood	6,737
Woolston	2,532
Sumner	844
Akaroa	559
On shipboard	5

Counties.	Census, 1901.
Ashburton	11,342
Geraldine	5,991
Levels	5,496
Mackenzie	1,642
Waimate	5,653
Waitaki...	9,086
Waihemo	2,014
Waikouaiti	4,082
Peninsula	2,561
Taieri	7,179
Bruce	4,762
Tuapeka	6,272
Clutha	6,445
Maniototo	3,792
Vincent	4,362
Lake	2,535
Southland	22,583
Wallace	7,989
Fiord	124
Stewart Island	253
On shipboard	19

Boroughs.	Census, 1901.
Ashburton	2,322
Temuka...	1,465
Timaru	6,424
On shipboard	62
Waimate	1,359
Oamaru	4,836
On shipboard	17
Hampden	331
Palmerston South	738
Hawksbury	690
Port Chalmers	2,056
On shipboard...	149
North-east Valley	3,527
Maori Hill	1,550
West Harbour	1,465
Dunedin	24,879
On shipboard	228
Roslyn	4,632
Mornington	4,008
Caversham	5,266
St. Kilda	1,700
South Dunedin...	5,363
Green Island	667
Mosgiel	1,463
Milton	1,241
Kaitangata	1,463
Lawrence	1,159
Roxburgh	478
Tapanui	350
Balclutha	1,017
Naseby	505
Cromwell	642
Alexandra	818
Arrowtown	410
Queenstown	690
Gore	2,354
Mataura	867
Winton	474
Invercargill	6,215
Invercargill North	925
Invercargill South	1,874
Invercargill East	939
Avenal	355
Gladstone	329
Campbelltown	1,350
On shipboard	303
Riverton	815

The total county population amounted to 417,596, or 54·04 per cent. of the total for the colony.* In counties are included all towns not constituted municipal boroughs; but, on the other hand, the people living in many of the boroughs can hardly be called town population. The population in boroughs was 350,202 persons, or 45·32 per cent. of the whole. For every 100 persons resident in counties in 1901 there were 84 residing in boroughs. In 1896 the counties had 391,735 persons, and the boroughs 307,294, or, in other words, for every 100 persons in counties, 78 were residents of the boroughs. Thus it will be seen that the proportion of the town to the county population was greater in 1901 than in 1896.

* For population of ridings, road districts, and localities, see Census volume, Part I.

Chief Cities and Suburbs.

The Cities of Auckland, Christchurch, and Dunedin have considerable suburbs. The suburban population of Wellington is comparatively small. The following gives the names and populations of the several localities which may fairly be termed suburbs of the four principal cities:—

Suburbs of Auckland.

Boroughs—	Population, Census, 1901.
Birkenhead	1,057
Devonport	3,823
Newmarket	2,060
Grey Lynn (Newton)	4,110
Parnell	4,566
Road Districts—	
Arch-hill	1,671
Eden Terrace	2,011
Epsom	750
Mount Albert	2,085
Mount Eden	5,129
Mount Roskill	581
One-tree Hill	1,283
Point Chevalier	684
Remuera	2,186
Northcote Riding	767
Outlying portion of Parnell Riding, being land in the Domain with hospital on it	250
Total suburbs	33,013
Auckland City	34,213
Total Auckland and suburbs	67,226

Suburbs of Wellington.

Boroughs—	
Onslow	1,499
Melrose	2,995
Karori	1,212
Total suburbs	5,706
Wellington City	43,638
Total Wellington and suburbs	49,344

Suburbs of Christchurch.

Boroughs—	Population. Census, 1901.
Sydenham	11,404
St. Albans	6,607
Linwood	6,737
New Brighton	1,008
Woolston	2,532
Road Districts—	
Spreydon	1,457
Halswell (part)	156
Riccarton (part)	4,371
Avon (part)	2,843
Heathcote (part)	2,388
Total suburbs	39,503
Christchurch City	17,538
Total Christchurch and suburbs	57,041

In laying off the suburbs of Christchurch the boundaries of the Christchurch Health District have been mainly followed.

Suburbs of Dunedin.

Boroughs—	
Caversham	5,266
Maori Hill	1,550
Mornington	4,008
North-East Valley	3,527
Roslyn	4,632
St. Kilda	1,700
South Dunedin	5,363
West Harbour	1,465
Total suburbs	27,511
Dunedin City	24,879
Total Dunedin and suburbs	52,390

The increase of population for ten years at the four chief centres, with their suburbs, was:—

	Census, 1891.	Census, 1901.	Numerical Increase.	Increase per Cent.
Auckland and suburbs	51,287	67,226	15,939	31·08
Wellington and suburbs	34,190	49,344	15,154	44·32
Christchurch and suburbs	47,846	57,041	9,195	19·22
Dunedin and suburbs	45,869	52,390	6,521	14·22

Thus the two principal cities of the North Island are found to have progressed between 1891 and 1901 at a greater rate than those of the Middle Island, and Wellington in particular to have developed at more than three times the rate of Dunedin, and more than twice as fast as Christchurch.

While New South Wales and Victoria present what is termed by the statistician of the former colony "the disquieting spectacle of capital towns growing with wonderful rapidity, and embracing in their limits one-third of the population of the territory of which they are the centre," New Zealand is saved from this by the configuration of the country, which has resulted in the formation of four chief towns, besides others of secondary importance but nevertheless trading centres of considerable consequence.

Population of Town Districts and Small Centres.

Besides the boroughs, there are 35 town districts (including the special town district of Rotorua, constituted under "The Thermal-Springs Districts Act, 1881,") which are portions of the counties in which they are situated. One only of these, Hampstead, has more than 1,000 inhabitants. A list of these town districts is subjoined, with populations, as in 1901:—

Town Districts.	Population.	Town Districts.	Population.
Kamo	260	Taradale	763
Helensville	531	Ormondville	459
Papakura	286	Waipawa	669
Te Awamutu	355	Kaikora North	268
Kihikihi	222	Featherston	629
Ngaruawahia	245	Johnsonville	502
Rotorua*	914	Havelock	316
Opotiki	627	Amberley	417
Waitara (Raleigh)	765	Southbridge	396
Opunake	466	Hampstead	1,118
Inglewood	719	Tinwald	561
Normanby	370	Geraldine	868
Manaia	447	Allanton (formerly Grey)	227
Waverley	416	Outram	420
Lethbridge	230	Clinton	431
Bulls	501	Wyndham	417
Halcombe	336	Otautau	443
Clyde (Wairoa)	623		

In addition to the boroughs and town districts above referred to, the census results showed for 1901 throughout the colony no less than 683 places of the nature of townships, villages, or small centres without boundaries. It is impossible to say that the populations of these small centres are all strictly accurate, even for the census date, or given in such a way as to be fit for comparison one with another. In different cases more or less of surrounding country may have been considered as belonging to the centre, but there is at least at each place mentioned some sort of nucleus of population, if not a well-defined village or township. In making the statement the best has been done with a difficult matter, and

* Constituted under "The Thermal-Springs Districts Act, 1881."

the information is given as useful—in some cases, like that of Waihi and Reefton, important—even if open to objection here and there. The county in which each is situated is also given :—

	Population.		Population.
Abbotsford, Taieri	284	Blue Spur, Westland	135
Adair, Levels	206	Bombay, Manukau .. .	363
Adams's Flat, Bruce	76	Bowentown, Tauranga .	24
Adamson's, Southland ..	69	Brighton, Buller	19
Addison's Flat, Buller ..	208	Brighton, Taieri	119
Ahaura, Grey	219	Brightwater, Waimea ..	391
Albany, Waitemata	87	Broad Bay, Peninsula ..	156
Albert Town, Vincent ..	73	Brockville, Taieri	23
Alford Forest, Ashburton ..	221	Buckley, Cook	164
Alfredton (and vicinity), Masterton	332	Buffalo (and vicinity), Coromandel	574
Allandale, Waihemo	115	Bulltown, Ohinemuri	27
Allenton, Ashburton	837	Bunnythorpe (and vicinity), Oroua	148
Alma, Waitaki	123	Burke's, Mackenzie	143
Alton, Patea	58	Burnside (and vicinity), Taieri ..	469
Anderson's Bay, Peninsula ..	567	Burnveil and Lovell's Flat, Bruce	89
Annat, Selwyn	105	Burwood, Selwyn	140
Antonio's Flat, Inangahua ..	51	Cabbage Bay, Coromandel ..	18
Aongatete, Tauranga	22	Callaghan's, Westland ..	79
Aoroa, Hobson	373	Cambrian's, Maniototo ..	103
Apiti, Pohangina	128	Cambridge West, Waipa ..	238
Aramoho, Waitotara	1,002	Cape Foulwind, Buller ..	182
Arapohu, Hobson	189	Capleston, Inangahua	153
Aratapu, Hobson	556	Cardrona, Lake	126
Arden, Taieri	87	Castlecliffe, Waitotara ..	412
Argyle, Southland	80	Castlepoint, Castlepoint ..	22
Arthurtown, Westland ..	74	Centre Bush, Southland ..	83
Arundel, Geraldine	38	Charleston Buller	199
Ashley, Ashley	202	Charlton, Southland	108
Ashhurst (and vicinity), Oroua	545	Chatton, Southland	32
Athol, Southland	72	Cheltenham, Kiwitea	39
Avondale, Eden	826	Chertsey, Ashburton	99
Awahuri, Manawatu	42	Clareville, Wairarapa South ..	93
Awakino, Kawhia	124	Clarkville, Ashley	253
Awahui, Waiapu	51	Clifden, Wallace	93
Awhitu, Manukau	413	Clifton, Collingwood	60
Bainham, Collingwood ..	126	Clyde, Vincent	374
Bald Hill Flat, Vincent ..	175	Coalbrookdale, Buller	111
Ballance, Pahiatua	73	Coal Creek, Tuapeka	220
Bannockburn, Vincent ..	394	Coalgate (and vicinity), Selwyn	129
Barkly, Southland	63	Cobden, Grey	423
Barry's Bay, Akaroa	154	Collingwood, Collingwood ..	16
Basting's, Tuapeka	28	Cooptown, Akaroa	96
Beaconsfield, Levels	122	Coromandel, Coromandel ..	663
Beck's, Maniototo	67	Courtenay, Selwyn	161
Belfast, Selwyn	613	Crofton, Rangitikei	148
Belfield Village Settlement, Geraldine	166	Cromarty, Fiord	28
Belgrove, Waimea	156	Crushington, Inangahua ..	152
Bendigo, Vincent	49	Cullensville, Marlborough ..	84
Bennett's, Ashley	77	Culverden, Amuri	87
Berwick, Taieri	87	Dacre, Southland	44
Blackball, Grey	382	Dalefield, Wairarapa South ..	311
Black's Point, Inangahua ..	615	Danieltown, Wallace	68
Blackwater, Inangahua ..	149	Darfield, Selwyn	118
Blair Taieri, Taieri	35	Dargaville, Hobson	505

	Population.
Deborah, Waitaki	34
Deborah Bay, Waikouaiti	163
Denlair, Wanganui	61
Denniston, Buller	793
Dillman's, Westland	168
Dipton, Southland	68
Doyleston, Selwyn	154
Dromore, Ashburton	78
Drummond, Wallace	248
Drury (and vicinity), Manukau	364
Dunback, Waihemo	165
Dunganville, Grey	90
Dunkeld, Tuapeka	105
Dunsandel, Selwyn	236
Duntroon, Waitaki	181
Durietown, Wanganui	355
Duvauchelle's Bay, Akaroa	145
East Clive, Hawke's Bay	141
East Dipton (and vicinity), Southland	139
Eastern Bush, Wallace	17
Eastown, Wanganui	238
East Winton, Southland	155
Edendale, Southland	180
Egmont, Taranaki	33
Eketahuna, Eketahuna	340
Ellesmere, Selwyn	103
Eltham, Hawera	400
Enfield, Waitaki	161
Epworth, Geraldine	105
Ettrick, Tuapeka	68
Evansdale, Waikouaiti	52
Eweburn, Maniototo	103
Fairdown, Buller	75
Fairfax (and vicinity), Bruce	183
Fairfield, Taieri	110
Fairlie, Mackenzie	597
Feldwick, Wallace	23
Fendalton, Selwyn	309
Fernhills, Southland	70
Fernside (and vicinity), Ashley	550
Ferntown, Collingwood	81
Flax Swamp, Waikouaiti	87
Flaxton, Ashley	17
Fordell, Wanganui	283
Fortrose, Southland	131
Frankton, Lake	265
Frasertown, Wairoa	175
Galatea, Whakatane	14
Garfield, Wallace	42
Georgetown, Waitaki	84
German Bay, Akaroa	155
Gibbston, Lake	158
Gibbstown, Collingwood	192
Gimmerburn, Maniototo	196
Glenavy, Waimate	98
Gleniti (and vicinity), Levels	99
Glenorchy, Lake	18
Glenore, Bruce	81
Glentunnel, Selwyn	153
Golden Cross, Ohinemuri	383
Goldsborough, Westland	146
Gordon Special Settlement, Piako	89
Governor's Bay, Akaroa	169
Grahamstown, Whangarei	60
Granity Creek, Buller	366
Grassmere, Southland	137
Greatford (and vicinity), Rangitikei	132
Greendale, Selwyn	340
Green Island Bush, Taieri	229
Greenlane, Eden	191
Greenpark, Selwyn	336
Greerton, Tauranga	99
Grovetown, Marlborough	352
Gumtown, Coromandel	107
Hakaru, Otamatea	44
Hakataramea (and vicinity), Waimate	264
Hamilton, Maniototo	27
Hampden, Waipawa	261
Hamua, Pahiatua	202
Hanmer Springs, Amuri	154
Harwood, Southland	81
Hastings, Thames	112
Hastwell, Mauriceville	220
Hatter's, or Nelson Creek, Grey	156
Hawarahu, Manukau	62
Havelock, Hawke's Bay	374
Hawarden, Ashley	66
Hawea, Vincent	39
Hawthorndale, Southland	42
Heddon Bush, Wallace	146
Henderson (and vicinity), Waitemata	357
Henley, Taieri	122
Herbert, Waitaki	282
Herbertville, Patangata	129
Heriot (and vicinity), Tuapeka	206
Highcliffe, Peninsula	222
Hikurangi, Whangarei	495
Hikutaia, Thames	152
Hillgrove, Waitaki	37
Hindon, Taieri	192
Hirstfield, Wallace	52
Hobsonville, Waitemata	194
Hodgkinson, Wallace	48
Hohoura, Mangonui	272
Holmesdale, Wallace	19
Horndon, Selwyn	188
Hororata, Selwyn	269
Howick (and vicinity), Manukau	617
Huia, Taranaki	54
Huiakama, Stratford	45
Huirangi, Taranaki	40
Hukerenui, Whangarei	110
Hunterville, Rangitikei	576
Huntly, Waikato	622
Hurunui, Ashley	58
Hyde, Maniototo	164

	Population.
Ida Valley, Vincent	203
Inangahua Junction, Inangahua	98
Inglewood, Southland	46
Islington, Selwyn	289
Jackeytown, Oroua	85
Josephville, Southland	19
Kaeo (and vicinity), Whangaroa	324
Kaihu, Hobson	105
Kai Iwi, Waitotara	111
Kaikohe, Bay of Islands	115
Kaikoura, Kaikoura	516
Kaitaia, Mangonui	106
Kaitawa, Pahiatua	95
Kakanui (North), Waitaki	126
Kakanui (South), Waitaki	181
Kakaramea, Patea	117
Kanieri, Westland	149
Kapanga, Coromandel	328
Karaka, Cook	110
Karangahake, Ohinemuri	205
Katu, Hokianga	48
Kaukapakapa, Waitemata	543
Kauriohore, Whangarei	191
Kawakawa, Bay of Islands	263
Kawarau Gorge, Vincent	40
Kawhia, Kawhia	158
Keel, Ashley	166
Kennedy Bay, Coromandel	89
Kennington, Southland	56
Kereru (and vicinity), Horowhenua	275
Kerrytown, Levels	156
Killinchy, Selwyn	77
Kimberley, Selwyn	149
Kimbolton, Kiwitea	219
Kingsdown, Levels	114
Kingston, Lake	61
Kirwee (and vicinity), Selwyn	333
Kohinui, Pahiatua	53
Kohukohu, Hokianga	128
Kokonga, Maniototo	45
Komaka, Pohangina	57
Konini (vicinity), Pahiatua	247
Kopu, Thames	166
Koru, Taranaki	93
Kuaotunu, Coromandel	375
Kukunui (Brownstown), Eketahuna	136
Kumeroa, Waipawa	148
Kuri Bush, Taieri	150
Kuriwao, Clutha	94
Kurow, Waitaki	264
Kyeburn Diggings, Maniototo	190
Kyeburn, Upper, Maniototo	78
Lake Hayes, Lake	194
Larrikins, Westland	90
Lauder, Maniototo	43
Leedstown (and vicinity), Rangitikei	269
Leeston, Selwyn	257
Leithfield, Ashley	298
Lepperton, Taranaki	36
Levin, Horowhenua	1,147
Lichfield, Piako	41
Lime Hills, Southland	96
Lincoln (and vicinity), Selwyn	464
Lintley, Southland	54
Linton, Oroua	61
Little Akaloa, Akaroa	233
Livingstone, Waitaki	123
Longburn (and vicinity), Oroua	358
Long Bush, Southland	215
Longford, Inangahua	25
Longridge, Southland	112
Lowburn, Vincent	133
Lowther, Southland	15
Luggate, Vincent	51
Lumsden, Southland	275
Lumsden Extension, Southland	162
Lyell, Buller	90
Macandrew, Southland	30
Macetown, Lake	113
Mackaytown (and vicinity), Ohinemuri	1,085
Mackenzie, Cheviot	113
Macrae's (and vicinity), Waihemo	59
Maheno, Waitaki	226
Maitland, Southland	22
Makakahi, Pahiatua	42
Makarewa, Southland	370
Maketu, Tauranga	41
Makikihi, Waimate	112
Makomako (and vicinity), Pahiatua	154
Makuri, Pahiatua	85
Makutoku, Waipawa	271
Manakau, Horowhenua	184
Mandeville, Southland	129
Mangahao, Pahiatua	43
Mangamahoe, Mauriceville	131
Mangamaire, Pahiatua	96
Mangaonoho, Rangitikei	342
Mangare (and vicinity), Manukau	702
Mangatainoko, Pahiatua	171
Mangawai, Otamatea	193
Mangaweka (and vicinity), Rangitikei	956
Mangonui, Mangonui	249
Mansfordtown, Waikouaiti	377
Manurewa, Manukau	70
Manutahi, Patea	72
Maori Gully, Grey	7
Mapourika, Westland	20
Marima, Pahiatua	50
Marsden, Grey	37
Marshalltown, Kiwitea	66
Martinborough (and vicinity), Wairarapa South	551
Matakanui, Vincent	219
Matakana, Rodney	172

	Population.
Matakohe, Otamatea	338
Matamau, Waipawa	292
Mauku (and vicinity), Manukau	306
Mauriceville, Mauriceville	209
Maxwelltown, Waitotara	207
Mayfield, Waitemata	112
Meanee, Hawke's Bay	63
Medbury Village Settlement, Ashley	130
Menzies' Ferry, Southland	91
Mercer (and vicinity), Manukau	208
Merryjigs, Inangahua	68
Merton, Waikouaiti	170
Methven, Ashburton	296
Middlemarch, Taieri	226
Midhirst, Stratford	330
Milford, Geraldine	157
Millwood, Southland	75
Mobaka, Wairoa	119
Mokau, Kawhia	70
Mokihinui, Buller	29
Mokoreta, Southland	47
Morley, Wallace	70
Morrinsville, Piako	300
Mosstown, Waitotara	225
Motu, Cook	64
Moutere, Waimea	129
Murawai, Cook	23
Murchison, Inangahua	104
Neavesville, Thames	25
Netherton, Ohinemuri	155
Nevis, Vincent	168
Newman, Eketahuna	178
Newport, Hobson	129
Ngahauranga, Hutt	168
Ngahere, Grey	123
Ngaire, Stratford	81
Ngakawau, Buller	12
Ngapara, Waitaki	201
Niagara, Southland	87
Nightcaps, Wallace	373
Nikau (and vicinity), Pahiatua	114
Nokomai, Southland	113
Nolan, Hawera	129
Normanby, Levels	130
Norsewood (and vicinity), Waipawa	914
Northcote, Waitemata	767
North Taieri (and vicinity), Taieri	602
No Town, Grey	66
Nukumaru, Waitotara	61
Oaklands, Peninsula	76
Oakura, Taranaki	44
Oban, Stewart Island	80
Ohaeawai, Bay of Islands	112
Ohau (and vicinity), Horowhenua	309
Ohaupo, Waipa	250
Ohinemutu, Rotorua	107
Ohingaiti (and vicinity), Rangitikei	464
Ohiwa, Opotiki	19
Ohoka, Ashley	426
Okaiawa, Hawera	94
Okaihau and Omapere, Bay of Islands	273
Okain's Bay, Akaroa	278
Okarito, Westland	66
Okato, Taranaki	92
Okoroire, Piako	211
Omahu, Thames	268
Omata, Taranaki	41
Ongaonga, Waipawa	107
Ophir, Vincent	132
Opitonui, Coromandel	277
Opua, Bay of Islands	62
Opuriao, Whakatane	161
Oraka, Wallace	185
Orari, Geraldine	118
Ormond (and vicinity), Cook	482
Oropi, Tauranga	53
Orwell Creek, Grey	59
Otahuhu, Manukau	1,211
Otaki (and vicinity), Horowhenua	629
Otakia, Taieri	102
Otara, Opotiki	150
Otara, Southland	135
Otawa, Manukau	53
Otekaike, Waitaki	54
Otiake, Waitaki	118
Otorohanga, Kawhia	150
Owaka, Clutha	635
Owen Junction, Inangahua	28
Owharoa (and vicinity), Ohinemuri	485
Oxford East, Ashley	311
Oxford West, Ashley	176
Paeroa, Ohinemuri	1,504
Pahia, Wallace	151
Pahautanui, Hutt	104
Paikakariki, Hutt	160
Pakawau, Collingwood	39
Pakington, Manukau	69
Panmure, Eden	259
Papanui, Selwyn	270
Paparata, Manukau	180
Papatoitoi (and vicinity), Manukau	219
Parangahatu, Akitio	55
Paraparaumu, Hutt	198
Parkville, Eketahuna	202
Patumahoe, Manukau	148
Patutahi (and vicinity), Cook	228
Peel (and vicinity), Geraldine	170
Pembroke, Lake	130
Pigeon Bay, Akaroa	157
Pihama, Hawera	27
Pine Hill, Waikouaiti	41
Pipiriki (and vicinity), Wanganui	233
Piritarau, Waiapu	164
Pirongia East, Waipa	89

	Population.
Pleasant Point, Levels	749
Pleasant Valley, Waikouaiti	50
Pleckville, Eketahuna	71
Plimmerton, Hutt	92
Pohangina, Pohangina	167
Pokeno (and vicinity), Manukau	460
Porirua, Hutt	80
Porangahau, Patangata	187
Poro-o-torao, Clifton	235
Port Albert, Rodney	241
Port Awanui, Waiapu	51
Port Moeraki, Waitaki	197
Port Waikato, Raglan	14
Portobello Town, Peninsula	50
Puangi, Clifton	40
Puhoi, Rodney	39
Pukekohe East, Manukau	331
Pukekohe, Manukau	611
Pukerau, Southland	129
Pungarehu, Taranaki	143
Puni, Manukau	212
Purakanui, Waikouaiti	31
Puriri, Thames	220
Putara, Eketahuna	29
Putiki, Wanganui	145
Queensbury, Vincent	54
Raetihi (and vicinity), Wanganui	433
Raglan, Raglan	114
Rahotu, Taranaki	80
Rakaia, Ashburton	439
Rakaia Village Settlement, Ashburton	187
Rakaunui, Akitio	46
Rama Rama, Manukau	204
Rangiriri, Waikato	76
Rangiwhia (Pemberton), Kiwitea	88
Rata Settlement, Rangitikei	210
Raupo, Otamatea	108
Rawene, Hokianga	103
Redcliffe, Waimate	86
Redwood Town, Marlborough	143
Reefton, Inangahua	1,722
Reidston, Waitaki	80
Renwicktown, Marlborough	292
Reynolds, Waikouaiti	35
Riccarton, Selwyn	313
Richmond, Selwyn	252
Richmond Grove, Southland	101
Rikiorangi, Hutt	138
Rimu, Westland	148
Rimu, Southland	56
Riversdale, Southland	312
Riwaka, Waimea	687
Rockville, Collingwood	102
Rolleston, Selwyn	85
Rongotea, Manawatu	229
Rotherham, Amuri	146
Rotorua, Rotorua*	759
Round Hill Diggings, Wallace	178
Ruapekapeka, Bay of Islands	119
Runciman, Manukau	30
Russell, Bay of Islands	246
Sandymount, Peninsula	177
Sanson, Manawatu	210
Sawyer's Bay, Waikouaiti	305
Scarborough, Levels	54
Scarborough (and vicinity), Pahiatua	198
Scotsburn, Geraldine	24
Sefton (and vicinity), Ashley	620
Selwyn, Selwyn	33
Serpentine, Maniototo	44
Shaftesbury, Piako	85
Shannon, Horowhenua	272
Shawfield, Waikouaiti	125
Sheffield, Selwyn	153
Shiel Hill, Peninsula	86
Shirley, Selwyn	165
Shortland, Thames	1,217
Silverstream, Mackenzie	98
Skippers, Lake	92
Southbrook (and vicinity), Ashley	1,070
Spring Creek (and vicinity), Marlborough	264
Springfield, Selwyn	247
Spring Grove, Waimea	348
Springston, Selwyn	644
Stafford, Westland	116
St. Andrew's, Waimate	127
St. Bathan's, Maniototo	231
St. Heller's Bay, Eden	24
St. Kilda, Buller	16
Stirling (and vicinity), Bruce	232
Stoke, Waimea	511
Strathmore, Stratford	54
Studholme Junction, Waimate	138
Swannanoa, Ashley	100
Swanson, Waitemata	147
Taheke, Hokianga	21
Taiaroa Heads, Peninsula	45
Taihape (and vicinity), Rangitikei	461
Taipa, Mangonui	20
Tairua, Thames	360
Taitapu, Selwyn	268
Takapau (and vicinity), Waipawa	431
Tamaki West (and vicinity), Eden	351
Tarras, Vincent	158
Tatararaki, Hobson	348
Taueru, Masterton	139
Tauherenikau, Wairarapa South	113
Taupaki, Waitemata	131
Taupiri, Waikato	136
Taupo, East Taupo	79
Tavistock, Waimate	28
Taylorville, Wanganui	33
Te Anui, Wallace	16
Te Aroha West, Piako	158
Te Aute, Waipawa	120

* Special Town District under "The Thermal Springs District Act, 1881."

	Population.
Teddington, Akaroa	69
Te Horo, Horowhenua	98
Te Kopuru, Hobson	325
Te Kuiti, Kawhia	134
Templeton, Selwyn	67
Teoneroa, Fiord	37
Te Puke (and vicinity), Tauranga	477
Te Teko, Whakatane	20
Thornbury, Wallace	262
Thorpe, Waimea	100
Tikorangi, Clifton	29
Tiniroto, Cook	62
Tinui, Castlepoint	295
Tokaanu, East Taupo	55
Toka-Toka, Otamatea	96
Toko, Stratford	240
Tokomaru, Horowhenua	116
Tokomaru (and vicinity), Waiapu	196
Totara, Whangaroa	155
Totara, Waitaki	176
Totara East, Grey	188
Tuakau, Manukau	418
Tuamarina, Marlborough	44
Tumai, Waikouaiti	22
Tutaekara, Pahiatua	58
Turua, Thames	244
Upper Hutt, Hutt	309
Urenui, Clifton	165
Utiku, Rangitikei	297
Vauxhall, Peninsula	52
Vogeltown, Taranaki	176
Waddington, Selwyn	134
Wade, Waitemata	229
Waianiwa, Southland	52
Waiau, Amuri	153
Waiau, Manukau	63
Waihi, Ohinemuri	3,813
Waihola, Bruce	190
Waihou (and vicinity), Piako	410
Waikaia, Southland	230
Waikaka, Southland	112
Waikanae, Horowhenua	149
Waikare, Ashley	417
Waikawa, Southland	44
Waikiwi, Southland	152
Waikoikoi, Clutha	13
Waimangaroa, Buller	151
Waima, Hokianga	43
Waimata, Cook	117
Waimate, Bay of Islands	105
Waimatuku, Wallace	166
Waimea West, Waimea	221
Wainuiomata, Hutt	48
Waiomio, Bay of Islands	74
Waiorongomai, Piako	154
Waiotahi, Opotiki	117
Waipahi, Clutha	130
Waipara, Southland	17
Waipara, Ashley	141
Waipipi, Manukau	135
Waipiro (and vicinity), Waiapu	118
Waipori, Tuapeka	211
Waipu Central (and vicinity), Whangarei	461
Waipukurau, Waipawa	565
Wairaki, East Taupo	25
Wairio (and vicinity), Wallace	271
Waitahuna, Tuapeka	301
Waitati (and vicinity), Waikouaiti	272
Waitekauri, Ohinemuri	441
Waitotara, Patea	173
Waituna, Kiwitea	53
Waiwera, Waitemata	59
Waiwera, Clutha	167
Waiuku, Manukau	205
Wakefield, Waimea	479
Wallacetown, Southland	160
Wallingford, Patangata	90
Wangaehu, Wanganui	19
Wangamomona, Stratford	23
Wanstead, Patangata	111
Waotu, West Taupo	71
Warepa, Clutha	217
Warkworth, Rodney	572
Washdyke, Levels	217
Waterford, Tauranga	50
Waterton (and vicinity), Ashburton	197
Wayne's, Waihemo	24
Weber, Patangata	159
Weedon's, Selwyn	106
Wereroa, Horowhenua	58
West Clive, Hawke's Bay	333
West Melton, Selwyn	280
Weston, Waitaki	237
Whakataki, Castlepoint	50
Whakarewarewa, Rotorua	48
Whakatane, Whakatane	239
Whangapoua, Coromandel	61
Whangaroa, Whangaroa	100
Whare Flat, Taieri	93
Whenuakiti, Coromandel	40
Whitecliffs, Selwyn	98
Whitmore, Oroua	80
Whitstone, Waitaki	51
Wickliffe Bay, Peninsula	30
Wimbledon, Patangata	90
Winchester, Geraldine	170
Windsor, Waitaki	130
Woodbury, Geraldine	111
Woodend, Ashley	365
Woodend, Southland	115
Woodfield, Southland	34
Woodlands, Southland	207
Woodside, Taieri	222
Woodside, Wairarapa South	23
Woodstock, Westland	189
Woodstock Village Settlement, Ashley	50
Wrey's Bush, Wallace	289
Yaldhurst, Selwyn	143

Population of Adjacent Islands.

The names and populations of the islands adjacent to and included in the colony were, in March, 1901:—

Islands.	Total.	M.	F.
Mokohinau Lighthouse	8	5	3
Tiritiri Lighthouse	5	2	3
Motuhora	7	4	3
Great Barrier	510	357	153
Little Barrier	11	1	10
Kawau	21	7	14
Ponui	27	11	16
Ponui Lighthouse	2	1	1
Ruthe's	15	9	6
Pakatoa	5	3	2
Pahiki	4	3	1
Waiheke	162	81	81
Week's (Puketutu)	6	3	3
Motuihi	11	9	2
Bean Rock Lighthouse	1	1	...
Motutapu	11	7	4
Rakino	4	2	2
Rangitoto	3	3	..
Brown's	8	4	4
Mercury	14	5	9
Cuvier and Lighthouse	7	4	3
Slipper	3	3	..
Motiti	2	2	..
East Island Lighthouse	6	5	1
Portland and Lighthouse	21	13	8
Kapiti	3	1	2
Somes and Lighthouse	7	5	2
Stephen's	18	9	9
Brothers Lighthouse	3	3	..
Quarantine	2	1	1
Ruapuke	9	9	..
Dog Island and Lighthouse	16	9	7
Centre and Lighthouse	9	5	4
Resolution	2	2	..
Chatham Islands	207	112	95
Kermadec Islands	8	5	3
Total	1,158	706	452

The islands which are not included within the boundaries of the counties had in 1901 a population of 1,158 persons (exclusive of Maoris), against 950 in 1896. Only three of the islands had a population over 100 persons at last census. The population of the Great Barrier increased since 1896 from 307 to 510 persons; Waiheke showed a decrease from 166 to 162 persons. Europeans at the Chatham Islands decreased from 234 to 207.

Population of Australasia.

The growth of population in these colonies over a period of forty years is shown in a comparative table. The total for March, 1901, being 4,557,323 persons, is greater than the population of Ireland or Scotland for 1900, and one-seventh part of the population of England and Wales for that year. The Australasian Colonies have

now twice the population of Denmark, over one-third more than Switzerland, and nearly that of the Netherlands.

Colony.	Persons. 1860.	Persons. 1870.	Persons. 1880.	Persons, 1890.	Census, March, 1901.
New South Wales ..	348,546	498,659	747,950	1,121,860	1,362,200
Victoria	537,847	726,599	860,067	1,133,266	1,201,506
Queensland ..	28,056	115,567	226,077	392,965	503,266
South Australia ..	124,112	183,797	267,573	319,414	362,604
Western Australia ..	15,227	25,084	29,019	46,290	182,553
Tasmania	87,775	100,765	114,762	145,290	172,475
New Zealand ..	79,711	248,400	484,864	625,508	772,719
Australasia ..	1,221,274	1,898,871	2,730,312	3,784,593	4,557,323

Arrivals and Departures.

The number of persons who arrived in the colony in the year 1900 was 18,074, a decrease of 432 on the number for the previous year. Of the arrivals in 1900, 16,203 persons were classified as adults, being above the age of twelve years, and 1,871 as children. The total number of males was 11,966 and of females 6,108. The arrivals from the United Kingdom numbered 2,314, and from Australia 14,565. Besides these, 298 persons came from Fiji, and 897 from the South Seas and other ports, including arrivals by mail-steamers from San Francisco.

Classified in respect of birthplace, it is found that 4,006 of the arrivals were persons born in the Australasian Colonies, 12,944 in the United Kingdom, and 59 in other British possessions. Of 1,065 persons born in foreign countries who arrived during 1900, 203 were born in Austria, 202 in Germany, 202 in France, 173 in the United States, 39 in Spain, 35 in Italy, 31 in Denmark, 20 in Sweden, 24 in Norway, 23 in Switzerland, and 113 in other countries.

Among the arrivals in 1900 are noticed 111 "race-aliens," or persons of other than European descent. Particulars of birthplace and sex are as under:—

Birthplace.	M.	F.	Total.
Asia Minor	3	0	3
China	26	1	27
Syria	3	1	4
Pacific Islands	39	12	51
Fiji	3	0	3
India	14	1	15
Cape of Good Hope	1	0	1
Japan	1	1	2
United States	5	0	5
Total	95	16	111

The practice of nominating immigrants to be brought out partly at the Government expense has been discontinued since the 16th December, 1890, and there was no free immigration in the year 1900. Certain reductions are, however, arranged by the Agent-General with the shipping companies in fares for men with moderate means who intend to take up land and settle in the colony.

Only 27 Chinese (26 men and 1 woman) arrived in the colony

during 1900, but 181 (all men) left, the departures thus exceeding the arrivals by 154.

The total departures in 1900, including 1,582 officers and men of the contingents for service in South Africa, were 16,243 persons, being 376 less than in 1899. Thus, the movement of population both to and from the colony is found to have been less than in the previous year.

The excess of arrivals over departures was 1,831 for the year 1900, against 1,887 in the previous twelve months. But these figures include 215 men of the contingents sent to South Africa in 1899 and 1,582 more who took their departure in the first quarter of the year 1900, which qualify the comparison, so that it is desirable to state the numbers exclusive of these troops.

DEPARTURES IN 1899 AND 1900, EXCLUDING THE CONTINGENTS FOR SOUTH AFRICA.

Year.	Total Departures.	Contingents.	Departures, excluding Contingents.
1899 ..	16,619	215	16,404
1900 ..	16,243	1,582	14,661

EXCESS OF ARRIVALS FOR 1899 AND 1900 OVER DEPARTURES, EXCLUDING CONTINGENTS.

Year 1899	2,102
Year 1900	3,413

Thus, by omitting the special element in the departures, consisting of the military who left for war purposes only, it will be seen that the results for 1900 are still more satisfactory than those for 1899, the gain for the latter year exceeding the other by 1,311 persons.

The departures from the colony by the Union Steamship Company's boats, as given through the Customs Department, are checked by special returns kindly furnished by the pursers of the steamers, and, where persons who did not book their passages have been omitted, the necessary additions are made. The pursers' returns also serve to prevent the occasional omission of the full number of persons leaving by any one vessel, which sometimes had happened previous to the introduction of this check. Unless more passengers are at any time of great pressure taken away from New Zealand than can lawfully be carried, the returns of outgo of population should prove very fairly correct, and indeed the last census shows that the estimated population even after five years' interval was a very close approximation to the truth.

Of the departures in 1900, 14,941 persons were over twelve years of age, and 1,302 children. More than twice as many males left the colony as females, the numbers being 11,043 and 5,200 respectively. The departures to the United Kingdom amounted to 1,254 persons, and those to Australia numbered 12,392. Besides these, 166 persons left for Fiji, and 2,431 for other ports (including passengers for San Francisco, and the troops for South Africa before mentioned).

In 1891 the colony lost population by excess of departures over arrivals, but in each of the years 1892 to 1900, inclusive, New Zealand has drawn to itself more population than it has parted with, notwithstanding the attractions of Australian and other gold-fields.

The arrivals and departures for ten years are given in the following statement, in which 1893 shows the highest number of persons inwards, 26,135, and 1894 of persons outwards, 22,984. In regard to Australia the movement was also greatest during the same years, the arrivals in 1893 being 22,351, and departures in 1894 20,488 persons:—

ARRIVALS, TEN YEARS.

Year.	From United Kingdom.	From Australian Colonies.	From other Places.	Total Arrivals.
1891	2,435	11,144	852	14,431
1892	2,555	14,674	893	18,122
1893	2,929	22,351	855	26,135
1894	2,846	21,291	1,100	25,237
1895	2,365	18,573	924	21,862
1896	1,956	14,125	1,155	17,236
1897	2,724	14,799	1,069	18,592
1898	2,598	14,969	1,288	18,855
1899	1,918	15,529	1,059	18,506
1900	2,314	14,565	1,195	18,074
Totals, ten years	24,640	162,020	10,390	197,050

DEPARTURES, TEN YEARS.

Year.	To United Kingdom.	To Australian Colonies.	To other Places.	Total Departures.
1891	1,705	15,016	908	17,629
1892	1,612	10,669	883	13,164
1893	1,583	13,277	863	15,723
1894	1,669	20,488	827	22,984
1895	1,703	18,377	887	20,967
1896	1,578	13,208	978	15,764
1897	1,592	13,293	955	15,840
1898	1,199	13,619	1,341	16,159
1899	1,324	14,184	1,111	16,619
1900	1,254	12,392	2,597	16,243
Totals, ten years	15,219	144,523	11,350	171,092

It will be found that the above figures give the total arrivals from the United Kingdom in ten years as 24,640 persons, and the departures as 15,219; and there is no reason to doubt the correctness of these results. The colony drew directly from the Mother-country 9,421 persons over and above those that went back directly during the ten-year period. For each year in the period the arrivals from the United Kingdom exceed the departures, but the excess was only 730 in the year 1891 and 594 in 1899. In regard to Australia, for each year given in the table, except 1891, the balance of interchange is in favour of New Zealand. For this ten-year period there was a net gain amounting to 17,497 persons from Australian Colonies.

The interchange of people with places other than the United Kingdom and Australia has been very even during the ten years under review, and, omitting the troops sent to South Africa, would show a balance in favour of New Zealand.

The Board of Trade, London, publishes the total emigration from the United Kingdom to Australasia as a whole. By the figures

given it will be seen that there was of late years an annual decrease in the number of persons coming to these colonies from the Home-country until 1897, when the number somewhat increased. Prior to 1893 the arrivals from the United Kingdom ranged from 44,055 in 1886 down to 16,183 in 1892. Alongside of the Imperial returns of departures to Australasia are shown in the following statement the arrivals in New Zealand direct from the United Kingdom, taken from our own returns, which numbers are short of the full total of persons coming here from England by the arrivals *viâ* Australia or the United States of America. But, using the information available, it seems evident that New Zealand has been latterly preferred to Australia, from the high proportion which the arrivals here (direct) bear to every hundred of departures from England for the Australasian Colonies.

So long as New Zealand can secure one-sixth or more of the total persons leaving England for Australasia, she takes more than the proportion her population bears to that of the seven colonies collectively:—

Year.	Emigration from United Kingdom to Australasia.	Arrivals in New Zealand from United Kingdom.	Arrivals in New Zealand per 100 Departures for Australasia from United Kingdom.
1893	11,412	2,929	25·67
1894	11,151	2,846	25·52
1895	10,809	2,365	21·88
1896	10,710	1,956	18·26
1897	12,396	2,724	21·97
1898	11,020	2,598	23·58
1899	..	1,918	..

A statement is added giving the arrivals and departures for each of the Australasian Colonies during the year 1900, and the result is shown to be a net gain to these colonies of 12,246 persons during the year:—

Colony.	Arrivals.			Departures.			Excess of Arrivals over Departures.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
	No.	No.	No.	No.	No.	No.	No.	No.	No.
New South Wales*	92,104	50,969	143,073	90,401	50,422	140,823	1,703	547	2,250
Victoria (by sea only)	53,559	28,598	82,157	53,946	29,738	83,684	−387	−1,140	−1,527
Queensland ...	26,519	12,601	39,120	24,634	10,799	35,433	1,885	1,802	3,687
South Australia (including Northern Territory)	49,246	28,909	78,155	48,945	29,711	78,656	301	−802	501
Western Australia (by sea only)	15,902	9,143	25,045	12,662	6,359	19,021	3,240	2,784	6,024
Tasmania ...	14,642	8,414	23,056	14,511	8,063	22,574	131	351	482
New Zealand ...	11,966	6,108	18,074	11,043	5,200	16,243	923	908	1,831

* Figures for 1899, latest available. — Denotes loss.

NOTE.—In these figures allowance has been made for unrecorded departures.

THE CHINESE.

At the census of 1881, the year in which taxation was first imposed on Chinese landing in the colony, the Chinese population amounted to 5,004 persons, which fell to 4,542 in 1886, to 4,444 in 1891, and further to 3,711 in 1896. In March, 1901, the census revealed a further fall to 2,857 persons. During the period 1881–96 the poll-tax was £10 per head, and this seemed sufficient for the purpose of preventing a large influx of the Chinese, except for the circumstance that, during the years 1894 and 1895, the arrivals shown by the Customs returns are found to have been somewhat greater than the departures. In 1896, the Chinese Immigrants Act Amendment Act of that year raised the poll-tax on Chinese immigrants to £100 per head, and limited the number of Chinese passengers that may be carried by vessels to this colony to one for every 200 tons burthen. In 1896 the amount paid by the Chinese as poll-tax was £1,270, in 1897 the sum was £240, in 1898 £400, in 1899 £300, and in 1900 £1,500. The number of Chinese in the colony at the end of the year 1900 is estimated to have been 3,077, of whom 34 were females.

Chinese immigration is under restraint in Australia as well as in New Zealand. In New South Wales the arrivals have been reduced until the number for 1896 was only 99, against 450 departures, by means of a similar poll-tax to that of New Zealand, and requirement that every vessel should not bring more than one Chinaman to every 300 tons. These conditions are helped by the law which forbids the naturalisation of a Chinese, and some prohibition as to mining without special authority. In 1887 no less than 1,798 Chinese paid poll-tax in New South Wales, and in 1896 the number was only 2.

There is now in operation in New Zealand an Act termed "The Immigration Restriction Act, 1899," which prohibits certain persons other than those of British birth and parentage from landing in this colony, but this law does not repeal the special legislation as to Chinese above referred to.

Of the Chinese living in New Zealand in 1901, when the last census was taken, 2,825 were males and 32 females.

SECTION XVIII.—THE MAORIS: PROBABLE ORIGIN, AND PRESENT NUMBERS.

Result of Researches as to Origin.

The following notes on this subject are supplied by Mr. S. Percy Smith, F.R.G.S. :—

In extension of the article under the head of "Maoris," given on page 4, *ante*, it may be stated that progress in the sciences of ethnology and philology has made some strides since those pages were first penned. Although an origin for the Maoris cannot be stated with certainty at present, it will serve a useful turn if some indication is given of the direction in which these researches, undertaken by several people, are tending. It is impossible in the brief space of a page or two to give the evidence on which the following is based; and, moreover, there are conflicts of detail which require further discussion, but the main outlines of the history of the Polynesians—of which race the Maori forms the most important section—can be given as a tentative theory.

It is obvious that the further back in point of time these researches are carried the more uncertain become the conclusions. But there is a point in the history of the race where their carefully treasured traditions become history. Comparison of the traditions preserved by various branches of the race all point to the West as their origin; and when we take up the direction thus indicated, and follow it out by the light shed on the subject by ethnology and philology, it will take us very far from the present home of the race.

It appears, then, from these indications, that the race once inhabited a mainland, which is believed to be India—inland India, the plains and foot-hills of the Himalaya, with their borders touching the sea on the Persian Gulf. Ages must have passed whilst the people dwelt in those parts; they became navigators, crossed the neighbouring seas, acquired many customs from some race of a Semitic origin, together with some words of their language. This neighbouring race was probably dwelling in Arabia and the shores of the Persian Gulf. But a time came when the race speaking the Aryan tongue began to make its appearance in India, a race of superior mental calibre, and probably more numerous. Before this intruding race the ancient Polynesian gradually retreated; but not at once. There was a period when much intercourse took place between the two races, when they mutually borrowed words and customs, and probably intermarried. How long this intercourse lasted there is no means at present of saying; but, in the course of centuries, probably, the intrusive race gradually forced the Polynesians southwards and seaward, where they acquired increased powers of navigation and the knowledge of surrounding lands. Voyages were made far East, to Indonesia, where the Polynesians found in occupation a negrito race, which is connected with, if not the same, as the Papuan.

Pressure from behind, as the Aryans increased in numbers, added to the knowledge of the east acquired by the Polynesians, now induced that people to remove in large numbers to Indonesia, where their superior physique and intelligence soon rendered them the masters of the former inhabitants. The race as a whole, however, did not migrate, for there are strong reasons for thinking that some of the hill tribes of India represent those who remained.

Along the shores of the many-isled Indonesia the people formed their homes the very nature of this islet-dotted sea exciting their powers as navigators and

rovers. It cannot yet be said how long the race remained in that part of the world, but it must have been counted by centuries. There is strong reason for thinking that their voyages extended far into the Pacific and to the north at this period.

Tradition begins now to take its part in the history of the race, and it is probable that the origin of the names Atia, Hawaiki-te-varinga, Vavau, Herangi, and many others must be looked for in these regions. But here comes in a difficulty in tracing these early names, due to the fact of the subsequent irruption of other races, who brought their own names with them, and applied them to places already named by the Polynesians, which thus became lost, except where preserved in the traditions of the emigrants.

About the first and second centuries of the Christian era the Polynesians came into touch with another ethnic wave—the Malay race, from the west and north-west. Again were the same scenes enacted as in distant India. At first wars, then periods of peace, when an interchange of customs and language took place. After a time of considerable duration, the Polynesians again moved on, nearly always to the east. The pressure of the Malay race forced them onward. Expert navigators and daring sailors as they were, the unknown was to them an attraction rather than a deterrent. There is little doubt that their patriarchal form of government had existed from the most ancient times, and that they were organized in tribes, owing allegiance to their own Arikis or supreme chiefs. Thus some tribes, and those that felt the outward pressure most, started away from Indonesia independently of the others, carrying with them their tribal gods and tribal customs. It is probable that at this time, some one tribe or more, varying the route that they had hitherto taken, retraced their steps, and finally reached Madagascar, where their supposed descendants, the Hovas, are still found. But this was not the general direction of the movement. The larger number proceeded to the *Hitinga* or sunrise. This was the first permanent migration into the Pacific. Tracing them by their own histories, and by such lights as modern science throws on the darkness of the past, it appears probable that these early voyagers, coasting along Northern New Guinea, the Solomon, and the New Hebrides—islands already occupied by the Papuan and Melanesian races—finally reached Fiji and Samoa, or Hawaiki, as all those groups are still called by the eastern Polynesians, but under the form Hawaiki-raro, or Leeward Hawaiki, to distinguish it from Hawaiki-runga, or Windward Hawaiki, the Tahitian and neighbouring group. This first migration, no doubt, extended its voyages very far. The original inhabitants of Tahiti, of Hawaii, and of New Zealand (the same people as the Moriori of the Chatham Islands) and the first inhabitants of Marquesas perhaps formed part of it.

But the pressure of the Malay races became more and more pronounced as they increased in numbers, and shouldered the Polynesian race remaining in Indonesia. The traditions refer to this as a time of trouble and unrest. Many of the Polynesians left for new fields; others who remained were eventually, and to a considerable extent, forced to the mountains, where, it is believed, their remnant may be seen to this day in several of the islands of Indonesia. Those who came east followed the footsteps of their countrymen who had preceded them, until they reached the Fiji group. This later migration appears to have been composed of a more warlike and more capable people than the first—centuries of contact with the Malays had influenced them—for we can trace them all through their migrations as the conquerors, whether pitted against their own race or the Melanesian. In Fiji, they occupied the Lau, or eastern group, but held frequent communication with the other islands, to all of which they gave names, differing from those known to the Fijians of to-day. It is obvious they mixed in blood with the original Melanesians, and thus acquired that strain that may be recognised in some branches of the Polynesians to-day. Doubtless, the original Fijians, occupying as they did the most easterly outpost of Melanesia, were the most adventurous of that race, and the best navigators. It is probable for this reason, and for others now obscure, that the Polynesian, with his high idea of caste, and racial dislike of black people, condescended to

mix with the Fijians, which there is reason for thinking he did not do, or only to a limited extent with other Melanesians, on the passage south past the Solomons, New Hebrides, &c.

During the occupation of Fiji, voyages were not infrequent to the neighbouring islands of Samoa and Tonga. This is apparent from both Samoan and Tongan histories. Here it is necessary to remark that a close study of the above traditions leads to the conclusion that when the Fijians are mentioned therein, it is the Polynesian immigrants that formed the later migration into the Pacific that are referred to, not the native Fijians.

A time, however, came in the history of the race when great troubles arose in Fiji; there was much fighting and general unrest—much voyaging to and fro to the neighbouring groups and to more distant ones. Eventually a combination of forces took place between the Fijian Polynesians and the Tongans of Vavau and Haapai, and a descent was made on Samoa. This group was practically conquered, and the Samoans driven to the mountains, whilst the invaders occupied the coasts. This occupation of Samoa covered some generations; and during this time—which was, roughly, about from the tenth to the twelfth centuries—these capable, warlike Fiji-Polynesians, warriors and sailors, spread far and wide over the Pacific. These are the people who formed the southern and later migration to the Hawaiian Islands referred to by Fornander, and who, on their arrival in that group, soon acquired the leading position, which they have held down to the present day. The same thing occurred in other groups. They occupied Tahiti and the neighbouring islands, the Paumotu group, the Marquesas, Rarotonga, and, after some time, turned their faces south-westward and settled in New Zealand, where they arrived in a fleet of canoes in about the year 1350. These are the people who are generally termed Maoris, and who, on their arrival and after settling down in the land, by their masterful ways, greater intelligence, force of character, and probably superior physique, eventually became the conquerors of the people belonging to the prior migration into the Pacific, whom they found in occupation of these Islands.

These people were daring voyagers, in comparison with whom the most noted European navigators of the middle ages were mere coasters. The Polynesian chronicles relate voyages extending from Fiji to Easter Island, from New Zealand to the Hawaii group, and even to the antarctic regions. They were never equalled as voyagers until the sixteenth century, which saw such an extension of nautical enterprise, originating in Europe.

Present Numbers of the Maoris.

The census of the Maori population—that is, full-blooded Maoris, with all half-castes living as members of a Native tribe—was taken under the supervision of the officers of the Justice Department in the latter part of February, 1901. The enumeration of the Natives cannot be effected for one particular night, as is done with Europeans, and the instruction given to Enumerators was that the work should be done in as short a period of time as possible, beginning in the third week of February, and leaving the remainder of that month, and the month of March, for the work of examining, correcting, and completing the returns.

The names of the Natives were given in the Sub-Enumerators' books, besides information as to sex, age, principal tribe, sub-tribe, or hapu to which belonging, and particulars as to extent of cultivations owned individually or communally, with live-stock.

The results of the census, being the figures as given in the Enumerators' summaries, are as under :—

	Maoris.			Half-castes living as Members of Maori Tribes (included in the preceding Numbers).		
	Persons.	Males.	Females.	Persons.	Males.	Females
North Island	40,665	21,903	18,762	2,491	1,390	1,101
Middle Island	1,916	1,025	891	567	295	272
Stewart Island ..	112	66	46	13	5	8
Chatham Islands—						
Maoris	181	91	90	34	15	19
Morioris	31	15	16	18	8	10
Maori wives living with European husbands ..	196	..	196	..	..	..
Totals ..	43,101	23,100	20,001	3,123	1,713	1,410

Besides the half-castes included in the above table, there were 2,407 half-castes (males, 1,188; females, 1,219) living with and enumerated as Europeans at the time of the census.

In these numbers will be noticed 13 of the old aboriginals, termed Morioris, and 18 Moriori half-castes at the Chatham Islands, and 196 Maori wives of European husbands. These Native wives of Europeans numbered 229 at the census of 1896, and 20 Morioris were then enumerated.

SECTION XIX.—FINANCE.

SUBSECTION A.—REVENUE AND EXPENDITURE OF THE GENERAL GOVERNMENT.

THE revenue for the year ended 31st March, 1901, was £5,906,916, and the ordinary expenditure £5,479,703, leaving a balance of £427,213. Out of the balance brought forward from the previous year (1899–1900) of £605,351, a transfer of £500,000 was made to the Public Works Fund, leaving £105,351 to be added to the results of the year's transactions, producing at the close of the year a balance amounting to £532,564.

The chief heads of revenue and expenditure are shown in the following table:—

REVENUE AND EXPENDITURE.

Revenue.	£	£	*Expenditure.*	£	£
Balance on 31st March, 1900		605,351	His Excellency the Governor	5,451	
Customs duties	2,180,862		Legislative	49,990	
Beer duty	85,171		Ministers' salaries and allowances ...	11,194	
Stamps (including Postal and Telegraph cash receipts)	903,935		Interest and Sinking Fund charges	1,745,616	
Land-tax	294,584		Exchange and commission	22,121	
Income-tax	173,809		Pensions, civil and military	40,691	
Railways	1,720,641		Old-age Pensions ...	199,708	
Registration and other fees	67,537		Railways	1,145,088	
Marine dues	29,553		Public Instruction ...	481,087	
Miscellaneous	126,411		Postal and Telegraph services	416,364	
Territorial revenue ...	270,203		Judicial and legal ...	248,152	
		5,852,706	Hospitals and charitable institutions	82,487	
Other receipts—			Defence	229,704	
Proceeds of debentures for increases of Sinking Fund	52,800		Subsidies to local bodies	76,533	
Recoveries in respect of "Unauthorised" of previous years (trade with South Africa) ...	1,411		Department of Agriculture	76,060	
		54,211	Lunatic Asylums ...	59,092	
Proceeds of debentures issued under "The Dairy Industry Act, 1898"		1,781	Valuation Department ...	23,560	
			Customs	37,361	
			Marine (Harbours and Lights)	44,073	
			Printing and Stationery	29,375	
			Land and Income Tax Department	19,030	
			Registration of Land and Deeds, Births, Deaths, and Marriages ...	18,878	
			Public Buildings and Domains	22,087	
			Miscellaneous expenditure	153,949	
			Territorial expenditure...	242,033	
					5,479,704
			Other expenditure—		
			Transferred to Public Works Fund		500,000
			"The Dairy Industry Act 1898": Amount advanced to dairy companies		1,781
			Balance on March 31, 1901 ...		532,564
	£6,514,049				£6,514,049

Ordinary Revenue.

With the exception of "Land-tax," the chief heads of ordinary revenue show good increases for the year 1900–1901 over the figures for 1899–1900, but especially satisfactory is the result of the Income-tax. When considering the figures given it must be remembered that population increased at the rate of 1·86 per cent., so that any rate above this means a higher ratio of revenue. Taking the items in order of their magnitude, the advance is shown below :—

Heads of Revenue.	Ordinary Revenue.				Increase.	
	1899–1900.	Per Cent. of Total.	1900–1901.	Per Cent. of Total.	Numerical.	Centesimal.
	£		£		£	Per Cent.
Customs duties	2,107,567	39·63	2,180,862	39·07	73,295	3·48
Railways...	1,621,613	30·49	1,720,641	30·82	99,028	6·11
Stamps (including Postal and Telegraph cash receipts)	860,898	16·19	903,935	16·19	43,037	5·00
Land-tax...	293,627	5·52	294,584	5·28	957	0·33
Income-tax	128,721	2·42	173,809	3·11	45,088	35·03
Beer duty	80,292	1·51	85,171	1·53	4,879	6·08
Registration and other fees	74,373	1·40	67,537	1·21	- 6,836*	- 9·19*
Marine	27,820	0·52	29,553	0·53	1,733	6·23
Miscellaneous	123,246	2·32	126,411	2·26	3,165	2·57
Ordinary revenue...	5,318,157	100·00	5,582,503	100·00	264,346	4·97

* Decrease.

The amount derived from Customs duties was 3·48 per cent. greater than that shown for 1899–1900, Beer duty 6·08 per cent., Income-tax 35·03 per cent., Stamps, &c., 5·00 per cent., and Railway revenue shows an advance of 6·11 per cent. While the population of the colony increased by 1·86 per cent. during 1900–1901, the ordinary revenue advanced at the much higher rate of 4·97, as shown above.

The Customs and Excise duties in 1900–1901 accounted for £40 12s. 0d. out of every £100 of ordinary revenue collected; Railways, £30 16s. 5d.; and Stamps, &c., £16 3s. 9d. Of other items the Land-tax yielded 5·28 per cent., and Income-tax 3·11 per cent. of the revenue.

Territorial Revenue.

Territorial revenue belonging to the Consolidated Fund increased from £262,229 in 1899–1900 to £270,203 in 1900–1901, or at the rate of 3·04 per cent. In the previous year, 1899–1900, there was

a decrease of 4·22 per cent. Details for the last two years are as under :—

	Territorial Revenue.				Increase or Decrease, 1900–1901.	
	1899–1900.	Per Cent. of Total.	1900–1901.	Per Cent. of Total.	Numerical.	Centesimal.
	£		£		£	Per Cent.
Cash land sales	73,592	28·06	78,794	29·16	5,202	7·07
Deferred-payment land sales	17,239	6·58	10,575	3·91	-6,664	-38·66
Pastoral runs, rents, miscellaneous	171,398	65·36	180,834	66·93	9,436	5·51
Territorial revenue	262,229	100·00	270,203*	100·00	7,974	3·04

* Exclusive of revenue derived from land set apart for State forests, £14,915; lands for close settlement, £72,761; and of the Cheviot Estate, £14,121. These moneys are credited in the separate *loan* accounts to which they belong. The amount of all moneys taken by the Receivers of Land Revenue during the year ended 31st March, 1901, will be found stated, under each head, in Section XX., "Crown Lands."

By the foregoing table the cash land sales for 1900–1901 are shown to have increased by 7 per cent., and to supply 29 per cent. of the whole territorial revenue of the Consolidated Fund; while rents and miscellaneous, which constitute 67 per cent. of the total, have also increased, but at a lesser rate.

Ordinary and Territorial Revenue.

The total ordinary and territorial revenue is found to have increased from £5,580,386 in 1899–1900 to £5,852,706 in 1900–1901, at the rate of 4·88 per cent., or more than twice the rate at which population increased :—

	Ordinary. £	Territorial. £	Total. £
Year 1900–1901	5,582,503	270,203	5,852,706
" 1899–1900	5,318,157	262,229	5,580,386
Increase ..	264,346	7,974	272,320

After allowing for alteration in system of charging interest and sinking fund, the charges of the public debt, paid out of the Consolidated Fund, in proportion to the ordinary and territorial revenue are found to have fallen from 41·6 per cent. in 1890–91 to 29·83 per cent. in 1900–1901.

If the sum of £89,369, the amount of territorial revenue received by way of land sales in 1900–1901, is deducted from the total revenue, the charges of the public debt will be found to have absorbed 30·29 per cent. of the revenue, reduced by the sum derived from relinquishment of real estate of the Crown.

Total Revenue of General Government.

The whole of the revenue of the General Government arising from taxation as well as from other sources for the last six financial years exhibits great progress. The rates of taxation and of revenue per head of mean population are given to illustrate this.

Year ended 31 March.	Revenue.			Rate of Taxation per Head of Mean Population.	Rate of Revenue per Head of Mean Population.
	From Taxation.	From other Sources.	Total.		
	£	£	£	£ s. d.	£ s. d.
1896	2,335,760	2,220,255	4,556,015	3 7 1	6 10 10
1897	2,521,911	2,276,797	4,798,708	3 11 0	6 15 1
1898	2,678,576	2,400,654	5,079,230	3 13 11	7 0 2
1899	2,707,099	2,551,129	5,258,228	3 13 3	7 2 3
1900	2,891,126	2,808,492	5,699,618	3 16 10	7 11 6
1901	3,042,890	2,864,026	5,906,916	3 19 6	7 14 4

The total revenue is shown to have increased from £4,556,015 in 1895–96 to £5,906,916 in 1900–1901, a difference of £1,350,901, while the proportion to population has increased by over £1 per head. The greater yield from the sources of taxation exhibited by the above figures can be regarded as indicative of increased prosperity enjoyed by the people of the colony.

Ordinary Revenue Expenditure.

The expenditure for 1900–1901 (exclusive of expenditure properly belonging to territorial purposes) amounted to £5,237,671, of which the largest item, after the charges of the public debt, £1,745,616, was on account of railways, £1,145,088. Public instruction cost £481,087, of which £398,766 was for carrying on the Board schools; £17,748 for technical and higher education; £17,475 for Native schools; £14,704 for industrial schools; and £25,000 for school buildings. The postal and telegraph services cost £416,364. Under the heading "Judicial and Legal" the total sum expended was £248,158, of which the largest item was the police, £117,744; the next, District and Magistrates' Courts, £45,946; and, thirdly, prisons, £29,526. Hospitals and charitable institutions cost £82,487, and the lunatic asylums £59,092. Defence required £229,704; the Department of Agriculture £76,060; and the Valuation Department £23,580. Payments of old-age pensions required £199,708 for the year.

Territorial Revenue Expenditure.

The chief items of expenditure under this head are the Lands and Survey Department, £137,838, and Mines, £12,200; while there

was paid to local bodies £86,702 (£34,233 being "thirds" and "fourths" under the Land Act; and £19,093 for the Greymouth, £6,508 for the New Plymouth, and £26,868 for the Westport Harbour Boards); besides £4,762 expended in management of water-races, and £531 in rates on Crown lands.

Ordinary and Territorial Revenue Expenditure: Six Years.

The expenditure out of ordinary and territorial revenue during the last six financial years shows increase, but less than the increase of revenue before alluded to. The chief heads of expenditure are given below. It must be noted that the old-age pensions become a large item for the years 1899–1900 and 1900-1901:—

Expenditure.	Financial Years (ended 31st March).					
	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-1901.
	£	£	£	£	£	£
Charges of the Public Debt ..	1,683,775	1,709,469	1,741,413	1,767,468	1,749,394	1,745,616
Railways ..	744,200	776,748	849,923	968,917	1,039,412	1,145,088
Public Instruction (including School-buildings, Industrial and Native Schools, and Deaf-and-dumb Institution)	453,156	461,582	466,925	475,218	472,653	481,087
Postal and Telegraph ..	338,836	352,386	362,993	388,546	388,582	416,364
Militia and Volunteers	98,985	88,742	91,388	119,051	162,940	229,704
Old-age Pensions	..	..	..	3,124	157,095	199,708
Crown Lands and Surveys ..	117,498	115,247	119,920	114,469	123,441	137,838
Police and Armed Constabulary ..	98,014	100,401	104,214	115,293	115,752	117,744
Other expenditure	836,017	905,406	865,596	906,425	930,858	1,006,555
Totals ..	4,370,481	4,509,981	4,602,372	4,858,511	5,140,127	5,479,704

Loan Accounts Expenditure, 1900–1901.

In addition to the expenditure above referred to, there were also—excluding operations on debentures, &c.—disbursements during the financial year ended 31st March, 1901, out of the Public Works Fund to the amount of £1,309,021, chiefly for roads, railway construction, and for public buildings; also out of the Land for Settlements Account the large sum of £200,538 for purchase of estates to be cut up for close settlement, including contingent expenses. This account also aided the Consolidated Fund by reducing the interest to be paid to the extent of £50,910. The Loans to

Local Bodies Account, which deals with moneys used chiefly for roading the more inaccessible country and for water supply, shows an expenditure of £176,346; and for interest on debentures, surveys, roads, &c., in connection with the Cheviot Estate £8,937 was paid. Details of all these are given. The total expenditure out of loan accounts was £1,746,141, or adding £500,000 for temporary advances repaid, £2,246,141. As previously explained, this account was aided by a transfer from revenue of £500,000 to the Public Works Fund.

EXPENDITURE OUT OF LOAN ACCOUNTS, 1900-1901.

	£	£
Public Works Fund—		
Immigration	214	
Public Works, Departmental	12,933	
Railways	717,723	
Roads	315,791	
Development of goldfields	15,907	
Purchase of Native lands	28,688	
Telegraph extension	50,101	
Public buildings	121,364	
Lighthouses, harbour-works, and defences	6,517	
Rates on Native lands	673	
Contingent defence	37,650	
Charges and expenses of raising loans	1,460	
		1,309,021
Cheviot Estate Account—		
Interest (including arrears)	8,866	
Surveys, roading, &c.	71	
		8,937
Lands for Settlement Account—		
Purchase of estates	186,621	
Expenses	13,917	
Interest recouped to Consolidated Fund	50,910	
Charges and expenses on issue of debentures under the Act	389	
		251,837
Loans to Local Bodies Account—		
Grants to Local Bodies	138,956	
Roads to open up Crown lands	37,390	
		176,346
Total		£1,746,141
Aid to Public Works and Land Settlements Acts—		
Temporary advances repaid		500,000
Total		£2,246,141

The expenditure out of loan accounts for five years may be summarised as given in the next table:—

Heads of Expenditure out of Loan Accounts.	Financial Years.				
	1896-97.	1897-98.	1898-99.	1899-1900.	1900-1901.
	£	£	£	£	£
Charges and expenses of raising loans	942	5	225	28,322	1,460
Cheviot Estate purchase and expenses	4,953	16,657	16,497	8,917	8,937
Contingent defence ..	10,554	10,360	13,867	42,810	37,650
Immigration	301	70	105	385	214
Land purchases	*442,535	*220,089	*571,642	*501,355	*280,575
Lighthouses, harbour-works, and defences	11,600	5,295	15,662	9,026	6,517
Public buildings	70,579	73,585	107,267	115,427	121,364
Public Works departmental expenditure	14,892	9,689	10,090	12,572	12,933
Railway construction and other works connected with railway extension ..	207,286	351,600	374,141	417,937	717,723
Rates on Native lands ..	332	156	347	744	673
Roads	†‡202,184	†309,548	†312,506	†316,753	†353,131
Telegraph extension ..	36,791	29,384	28,551	26,771	50,101
Development of goldfields..	10,508	33,117	17,355	21,815	15,907
Payments to Local Bodies under Government Loans to Local Bodies Acts ..	66,133	75,257	75,428	68,770	138,956
Totals	1,089,590	1,134,812	1,543,683	1,571,604	1,746,141

* Including sums expended in the purchase of land for settlements—viz., £313,572 in 1896-97; £158,586 in 1897-98; £518,459 in 1898-99; £469,331 in 1899-1900; and in 1900-1901, £251,837.

† Including sums expended under section 2 of "The Government Loans to Local Bodies Act, 1891"—viz., £31,017 in 1896-97; £18,770 in 1897-98; £16,972 in 1898-99; £31,363 in 1899-1900; and in 1900-1901, £37,390.

‡ Including sum expended under "The Lands Improvement Act, 1894"—viz., £106,930 in 1896-97.

§ *Excluding* amounts applied to investments by way of advances to settlers with charges and expenses, besides amounts for debentures redeemed and advances repaid.

The total amount of actual loan moneys under various heads raised from the beginning is roughly shown further on in a table dealing with the public debt of the colony.

Although the Public Works Fund forms the main source of the expenditure out of Loan Accounts, all the money included in it has not been raised from loans. Amounts from the Revenue of the Consolidated Fund were paid to the Public Works Fund during the last ten financial years as follows:—

	£
1891-92	30,000
1892-93	200,000
1893-94	250,000
1894-95	250,000
1895-96	150,000
1896-97	150,000
1897-98	300,000
1898-99	425,000
1899-1900	450,000
1900-1901	500,000
Total	£2,705,000

The expenditure each year since 1884 on services provided for by the Public Works Fund has been:—

Year.	Immigration.	Railways.	Roads.	Development of Goldfields.	Telegraph Extension.	Public Buildings.	Lighthouses, &c.	Other Services.	Totals.
	£	£	£	£	£	£	£	£	£
1884-85...	57,148	663,063	317,043	8,029	25,799	117,361	34,033	114,251	1,336,727
1885-86...	11,675	725,496	335,904	9,032	36,010	86,859	133,975	136,435	1,475,386
1886-87...	12,454	615,265	278,617	7,665	18,952	89,598	148,705	162,228	1,333,484
1887-88...	15,598	403,726	219,519	1,016	22,984	90,529	76,825	135,962	966,159
1888-89...	8,791	272,077	106,440	55	12,047	34,592	47,593	132,344	613,939
1889-90...	867	289,572	84,126	284	16,346	35,473	9,434	46,362	482,464
1890-91...	1,823	180,020	71,289	821	16,292	22,819	2,666	39,026	334,756
1891-92...	817	154,416	101,605	2,257	27,773	34,791	7,347	62,495	391,501
1892-93...	242	220,894	105,506	3,811	29,245	31,101	11,205	60,502	462,506
1893-94...	343	176,304	147,418	5,272	16,127	44,032	6,588	10,713	406,797
1894-95...	101	247,545	61,757*	5,865	19,229	54,190	3,145	9,578	401,410*
1895-96...	*Cr.* 10	197,105	66,774*	9,345	35,538	76,529	7,410	19,639	412,330*
1896-97...	301	207,231	64,292*	10,508	36,791	70,579	11,600	26,683	427,985*
1897-98...	70	351,600	290,777†	33,117	29,384	73,585	5,295	81,715	865,543†
1898-99...	105	374,141	295,534†	17,354	28,551	107,267	15,662	77,713	916,327†
1899-1900	385	417,937	285,532†	21,815	26,771	115,427	9,026	116,330	993,223†
1900-1901	214	717,723	315,791†	15,907	50,101	121,364	6,517	81,404	1,309,021†

* Exclusive of moneys spent on roads under Lands Improvement, Native Lands Purchase, and Government Loans to Local Bodies Accounts: £103,076 in 1894-95, £162,757 in 1895-96, £173,358 in 1896-97.

† The expenditure on roads under the first two Acts mentioned above (*) is included as part of Public Works Fund; the sum of £18,770 was also spent out of Loans to Local Bodies Account on roads to open up Crown lands in 1897-98, £16,972 in 1898-99, £31,361 in 1899-1900, and £37,390 in 1900-1901. These moneys have been excluded, as have also small sums expended in roading, &c., the Cheviot Estate.

Conversion Account.

Three-per-cent. stock to the value of £18,000 was inscribed, and 3½-per-cent. Consolidated Stock debentures (colonial issue) to the value of £509,500 were issued, during the year 1900-1901, which began with a credit balance of £39,902 in this account. Of this sum £50,690 was applied to pay off debentures, and £509,500 was exchanged for "Government Loans to Local Bodies Act, 1886," debentures, due 31st December, 1900. Expenses, the chief items of which were discount (£450), stamp duty (£1,550), interest (£946), brokerage and commission (£45), absorbed £3,324, leaving a credit balance in this account of £3,887 on the 31st March, 1901.

Loans for Government Advances to Settlers.

A notable feature in the legislation of the year 1894 was the passing of the Government Advances to Settlers Act, a description of which, with its amending Acts and the loan operations under the same, will be found in Part III.

The loans authorised to the 31st March, 1901, classified according to provincial districts, are shown in tabular form :—

Provincial Districts.	Loans authorised.		
	Number of Applications.	Amount applied for.	Amount of Advances authorised.
		£	£
Auckland	1,863	581,716	508,798
Taranaki	1,361	563,802	497,105
Hawke's Bay	725	223,410	199,270
Wellington	2,478	989,007	869,193
Marlborough	288	109,727	99,755
Nelson	157	51,380	45,330
Westland	112	28,845	25,435
Canterbury	818	252,787	218,900
Otago	2,129	890,331	781,114
Totals	9,931	3,691,005	3,244,900

Of the 9,931 advances authorised, 1,230 applicants declined the grants (£565,380) offered them, so that the net advances to the 31st March, 1901, numbered 8,701, and amounted to £2,679,520.

Of the total advances authorised, 8,180 were for advances under £500 in value and 1,751 over.

The number of applications received to the 31st March, 1901, was 12,999, for an aggregate amount of £4,540,828.

The advances authorised on fixed loans, according to provincial districts, to the 31st March, 1901, were :—

Provincial Districts.	No.	Amount of Mortgage.	Value of Security.
		£	£
Auckland	36	8,740	21,827
Taranaki	47	35,735	81,707
Hawke's Bay	17	6,500	15,052
Wellington	65	45,620	106,980
Marlborough	..	..	..
Nelson	3	250	963
Westland	5	570	1,757
Canterbury	11	8,425	17,199
Otago	75	45,445	96,977
Totals	259	151,285	342,462

The liabilities and assets at 31st March, 1901, of the Government Advances to Settlers Office were :—

Dr. *Liabilities.*	£	s.	d.
3-per-cent. Loan, redeemable 1st April, 1945, "A" ...	1,500,000	0	0
3-per-cent. Loan, redeemable 1st April, 1945, "B" ...	500,000	0	0
Temporary advances ...	380,000	0	0
Suspense Account	2,835	11	8
Accrued interest payable ...	99	2	3
Profit and Loss Account ...	46,720	6	2
	£2,429,655	0	1

Cr. *Assets.*			£	s.	d.
Investment Account—					
Advances on mortgages	£2,626,785	0 0			
Less repayments ...	495,684	11 5			
			2,131,100	8	7
Temporary investments, Bank of New Zealand guaranteed stock			4,836	17	0
Sinking Fund Investment Account with Public Trustee			70,639	16	5
Assurance Fund invested with Public Trustee			20,127	19	7
Mortgage instalments receivable, overdue			1,040	6	2
Bills receivable (Prior's deficiency)...			1,090	11	7
Interest receivable, overdue			4,734	6	7
" accrued			22,084	9	2
Cash in hand and in bank ...			29,872	3	4
Loan-flotation charges ...			143,928	1	8
			£2,429,655	0	1

"The Government Advances to Settlers Act Amendment Act, 1899," as an encouragement to the early payment of the prescribed instalments of interest on fixed loans, and of interest and principal on loans under the instalment principle, provides for a rebate to the mortgagor, which reduces his interest to 4½ per cent. in lieu of 5 per cent. per annum.

There are new alternative modes of disposing of moneys paid in advance laid down in this measure, but it is optional with mortgagors to adopt the new system instead of that previously in operation in respect of moneys paid before the commencement of the new Act, and which are held under the original arrangements.

Provision is made for the readjustment of loans by memorandum of adjustment, which gives elasticity to the system by treating the balance of principal due as a fresh loan granted for a new term.

The margin of security on loans is provided for as follows: In the case of fixed loans the amount of the loan is not to exceed three-fifths of the value of the security, while in case of loans under the instalment system on freehold security of first-class agricultural land, the amount of the loan is not to exceed two-thirds the value of the security; on other rural freeholds the limit is three-fifths.

Advances may now be made on the security of urban or suburban land, but on the instalment system only, and with limitation of amount to a maximum of two thousand pounds and a minimum of twenty-five.

Urban land is defined as that situate in a borough having a population of at least two thousand persons, and which is not used for farming, dairying, or market gardening. And suburban land means that which is situate in a borough having under two thousand people, or any town or vicinity, and which is not used for agricultural or dairying purposes as above referred to.

As to security for loans,—in the case of urban lands on which there are buildings, the amount of the loan is not to exceed three-fifths of the value of the land apart from the buildings, *plus* one-half of the value of the buildings apart from the land. When the land is suburban, having buildings thereon, the loan is not to exceed one-half of the value of the land apart from the buildings, *plus* one-half of the value of the buildings separately.

When the land be urban or suburban, but having no buildings, the loan is not to exceed one-half of the value of the land, and there is not to be any loan except for the erection of buildings, and to be by way of instalments as erection proceeds.

There is a further subdivision of the Act, under which special provisions are made for protecting the interests of the Advances to Settlers Department, with respect to other than freehold securities.

New Zealand Consols.

Another important financial Act, termed the New Zealand Consols Act, was passed in 1894, with the intention of providing further means of investment for the savings of persons resident in the colony. Some progress is being made in this class of deposits, which tends to show that the public may in time recognise the system as a means of safe and profitable investment of their savings. It is singular that deposits of moneys belonging to trust funds or minors are not more freely made. It is thought that the advantage of such an investment at a fair rate of interest and of a permanent character is not widely enough known.

Up to the 31st March, 1899, deposits amounting to £385,925 had been received in sums ranging from £5 to £150,000. During 1899–1900 the deposits inscribed totalled £55,562, and in 1900–1901 £17,902, making the sum invested to the 31st March, 1901, £459,389.

The system of making deposits in New Zealand Consols is fully described in Part III.

Aid to Public Works and Land Settlement.

"The Aid to Public Works and Land Settlement Act, 1896," empowered the Colonial Treasurer to raise £1,000,000: in aid of the Public Works Fund to the extent of £500,000, and the Lands Improvement Account and the Native Lands Purchase Account, £250,000 each. The sum of £750,000, bearing interest at 3½ per cent. per annum, was raised locally at par (£500,000 being issued with an alternative currency of ten or twenty-five years); the balance of £250,000 being placed upon the London market in the form of 3-per-cent. inscribed stock, along with the further loan referred to in the succeeding paragraph.

The Aid to Public Works and Land Settlement Act Amendment Act, passed in 1897, authorised the raising of an additional sum of £250,000 to be applied for the purpose of procuring £200,000 for further rolling-stock for railways, and for the repair of damages to lines by floods or otherwise; £25,000 for erection and repair of

public-school buildings, and another sum of £25,000 for purposes of building and equipment of technical schools.

"The Aid to Public Works and Land Settlement Acts Amendment Act, 1898," provided for raising £500,000 in addition to £250,000 raised under the Amendment Act of 1897, and the £1,000,000 under the principal Act of 1896, the provisions of which extend to the later Act.

Of £500,000 which was paid to the Public Works Fund the amount of £175,000 was allocated to railways construction, £200,000 was for new rolling-stock for open railways, and £125,000 for the construction of roads, bridges, and other works authorised.

Under "The Aid to Public Works and Land Settlement Act, 1899," the sum of £1,000,000 was authorised: £300,000 for railway construction, £225,000 for rolling-stock, £350,000 for land settlement and goldfields development, £50,000 for school-buildings, £50,000 for purchase of native lands, and £25,000 for harbour defence.

"The Aid to Public Works and Land Settlement Act, 1900," authorises the raising, in the colony or elsewhere, sums of money not exceeding one million sterling altogether, by debentures or scrip, or by the creation or issue of inscribed stock under "The New Zealand Consolidated Stock Act, 1877." The money is to be raised by the Colonial Treasurer on being authorised by the Governor in Council, who is to prescribe the mode and conditions of repayment of sums raised, the rates of interest thereon, with times and places for repayment of principal and interest.

There is provision for obtaining what money is wanted, pending the raising of the money authorised, by the sale, &c., of short-dated debentures, which are to bear interest not exceeding 4 per cent. per annum, and to have a currency of not more than seven years—but the interest on the money finally raised is limited to 3½ per cent.

All the money raised under the Act is to be placed to the credit of the Public Works Fund, to be applied to the following works and purposes:—

	£
1. Railways—	
Railway construction	500,000
Additional rolling-stock, &c., for open lines ..	300,000
2. Land settlement and goldfields development—	
Construction of roads, tracks, and bridges to open up back blocks, and other work in connection therewith	150,000
For developing goldfields	50,000
	£1,000,000

Loans under Land for Settlements Acts.

The moneys raised under these Acts and the operations by way of purchasing estates to be cut up for close settlement form the subject of a special section of this part of the Year-book (No. XXI.).

"The Government Loans to Local Bodies Act Amendment Act, 1899."

In view of the general lowering of rates of interest, this new Act modifies the terms of the principal Act by providing in respect of the debentures of any future loan, instead of interest payable at 5 per cent. for a term of twenty-six years, one or other of the following alternatives:—

Four and a half per cent. per annum for a term of twenty-six years; or

Four per cent. per annum for a term of thirty-two years; or

Three and a half per cent. per annum for a term of forty-one years.

The loans in existence at the passing of the Act may be readjusted so as to come under one or other of the alternatives under the new amendment quoted above.

The rate of 1½ per cent. per annum, which under the Act of 1892 forms the basis for calculating the amount payable to the Sinking Fund is now reduced to 1 per cent. per annum if the term of the loan is thirty-two years, and ½ per cent. if the term is for forty-one years.

SECTION XIX.—FINANCE—*continued.*

Subsection B.—Taxation.

The direct taxation prior to 1892 consisted of a property-tax of 1d. in the pound on all assessed real and personal property (with an exemption of £500), and the stamp duties; but in 1891 a Land and Income Assessment Act was passed repealing the property-tax. A full description of the system of the land- and income-tax will be found in a special article in Part III. of this work. The leading features only are briefly stated here.

The Assessment Act of 1891 provided for an ordinary land-tax on the actual value of land, allowing an owner to deduct any amount owing by him secured on a registered mortgage. Under the original Act the deduction for improvements might not exceed £3,000; but, by the Amendment Act of 1893, the value of all improvements whatsoever was exempted from liability to land-tax. Besides this, an exemption of £500 was allowed when the balance, after making deductions as above stated, was not above £1,500; and beyond that a smaller exemption was granted, but ceasing when the balance amounted to £2,500. There is a Consolidation Act passed in 1900 now in force. Mortgages are subject to the land-tax. The revenue from the ordinary land-tax is, in round numbers, about £222,000 per annum. The rate of ordinary land-tax for 1900–1901 was 1d. in the pound. Occupied Native land is taxed ½d. in the pound on the unimproved value.

In addition to the ordinary land-tax, there is a graduated land-tax which commences when the unimproved value is £5,000. For the graduated land-tax, the present value of all improvements is deducted; but mortgages are not deducted. The Act of 1893, while reducing the ordinary taxation on land by exempting all improvements, increased the graduated tax, and the revised rates are now one-eighth of a penny in the pound sterling when the value is £5,000 and is less than £10,000, from which the rate increases with the value of the property by further steps of an eighth of a penny until the maximum of 2d. in the pound is reached, payable when the value is £210,000, or exceeds that sum.

This graduated tax yields, in round numbers, £72,000 per annum, which is not included in the sum of £222,000 given above. Twenty per cent. additional tax is levied in case of persons who have been absent from the colony for three years or more prior to the passing of the yearly taxing Act. This amounts to about £1,000, and is included in the £72,000 shown above.

Income-tax is levied on all incomes above £300, and from taxable incomes a deduction of £300 is made. The rate of income-tax for 1900–1901 was 6d. in the pound on the first taxable £1,000, and 1s. in the pound on taxable incomes over £1,000.

Companies pay 1s. in the pound, and are not allowed the £300 exemption. The Act of 1893 further disallowed the £300 exemption in the case of persons not domiciled in New Zealand.

The revenue derived from income-tax may be roughly set down at £173,800 per annum.

The indirect taxation is made up of Customs duties, and excise duty on beer made in the colony.

The following statement shows the total amount raised by the General Government taxation in 1885, 1890, and the last six financial years ending 31st March :—

	Amount of Revenue raised by Taxation.	Amount per Head of Population (excluding Maoris).
	£	£ s. d.
1885	2,016,730 ..	3 10 10
1890	2,173,985 ..	3 10 0
1895–96	2,335,761 ..	3 7 1
1896–97	2,521,911 ..	3 11 0
1897–98	2,678,576 ..	3 13 11
1898–99	2,707,099 ..	3 13 3
1899–1900	2,891,126 ..	3 16 10
1900–1901	3,042,890 ..	3 19 6

The average annual amount of revenue raised by taxation during the nine years, 1882 to 1890 inclusive, was £3 8s. 11d. per head of population, excluding Maoris.

It may be well to call attention to the fact that a rise in the amount of taxation yielded per head of population may indicate (outside the question of increasing the rate of any particular tax levied) a satisfactory condition of business, as showing activity. In regard to the Customs, notwithstanding modifications of the tariff in 1895, the value of the imports for 1900–1901 was greater than for 1898–99 or 1899–1900, which would seem to show greater purchasing power than before, and that profits of trade would still allow of a large amount of duty being paid. The quantity of stocks in hand at the beginning and end of the two years, and any disturbance in prices during the period, may modify the above argument.

As the Maoris contribute somewhat to the Customs revenue, an allowance should be made on that account to ascertain more correctly the amount of taxation per head of the rest of the people. By including Maoris the Customs and excise duties per head of the rest of the population would be reduced by 3s. 2d. for the year 1900–1901. If this amount be deducted from the taxation per head

given for that year, the rate would be reduced from £3 19s. 6d. to £3 16s. 4d. This latter rate may fairly be used for comparison with the rates in the neighbouring colonies.

Of the total amount of taxation stated for the year 1900–1901, the indirect taxation, *i.e.*, Customs and excise duties, amounted to £2,266,032, while land- and income-tax, with stamps for taxation, yielded £776,858, which constitutes direct taxation. So that the colony still raises more than 75 per cent. of its revenue from taxation by means of the indirect method.

A table of the Customs tariff is given in detail in Part I. of this book (pp. 82–96), and the duties leviable upon estates of deceased persons on page 99.

Growth of Amount paid in Income-tax.

The amounts paid by way of income-tax, under a uniform rate of taxation, show great increase year by year, and afford satisfactory evidences of prosperity. These are quoted with a caution in regard to the figures for 1892 to 1895. The full number of persons properly liable to the tax may not have been ascertained at such time.

	Income-tax paid. £
1892–3	67,367
1893–4	75,238
1894–5	89,891
1895–6	92,778
1896–7	105,504
1897–8	115,210
1898–9	115,480
1899–1900	128,721
1900–1901	173,809

The increase from 1895–6 to 1900–1901 is £81,031, being a rate of 87·34 per cent., while the population increased during the same period by 9·86 per cent.

Taxation by Local Governing Bodies.

The various local bodies levied taxation during the year ended 31st March, 1900, to the amount of £813,657, or £1 1s. 7d. per head of European population. Of the total sum, £495,907 was raised by general rates, £218,244 by special and separate rates, £79,728 by licenses, and £19,778 by other taxes.

Taxation in Australasian Colonies.

The following were the rates of General Government taxation per head of population in the Australasian Colonies for 1899–1900 specifying the proportions derived from Customs and other taxes :—

Colonies.	Rate of Taxation per Head of Mean Population.			Proportion of Taxation from Customs and Excise Duties.	Ratio of Taxation by Customs to Value of Imports.
	Customs and Excise.	Other Taxes.	Total.		
	£ s. d.	£ s. d.	£ s. d.	Per Cent.	Per Cent.
Queensland ..	3 6 5	0 15 11	4 2 4	80·68	23·67
New South Wales	1 5 7	0 13 0	1 18 7	66·31	6·78
Victoria ..	1 19 0	0 11 7	2 10 7	77·09	12·63
South Australia	1 13 3	0 14 0	2 7 3	70·39	8·84
Western Australia	5 9 2	0 14 3	6 3 5	88·45	20·87
Tasmania ..	2 9 10	0 11 1	3 0 11	81·84	25·33
New Zealand (excluding Maoris)	2 18 2	0 18 8	3 16 10*	75·67	25·03

* Or, including the Maoris, £3 13s. 11d. See remarks on previous page.

Subsection C.—Public Debt.

The gross public debt of the colony on the 31st March, 1901, was £49,591,245, an increase of £1,716,793 on the amount owing at the end of the preceding financial year. A detailed statement of particulars relative to the various loans is supplied.

The total increase by the issue of debentures and conversion operations during the year was £1,767,483. On the other hand, debentures and stock amounting to £50,690 were redeemed, leaving, as stated before, a net increase to the gross public debt of £1,716,793.

The particulars of the items of increase are clearly shown below :—

	£		£
Debentures issued for—		Debentures redeemed—	
Aid to public works and land settlement	900,000	Consolidated Loan Act, 1867 ...	50,400
Loans to local bodies	176,000	Naval and Military Settlers and Volunteers Land Act, 1892 ...	290
Purchase of land for settlement	219,000	Gross debt on 31st March, 1901 ...	49,591,245
Sinking-fund accretions ...	52,800		
Advances to settlers	380,000		
Government accident insurance	2,000		
Advances to dairy companies	1,781		
Inscription—			
New Zealand Consols	17,902		
Conversion operations	18,000		
	1,767,483		
Gross debt, 31st March, 1900	47,874,452		
	£49,641,935		£49,641,935

The following table of the public debt of New Zealand states the debentures and stock in circulation on 31st March, 1901, under the several Loan Acts or Ordinances of the Colonial and Provincial Governments, the dates when redeemable, the sinking funds accrued in respect of the same, and the annual charge thereon for interest and sinking fund :—

Public Debt on 31st March, 1901.

—	Amount Outstanding.		Due Date.	Sinking Funds Accrued	Net Indebtedness.	Annual Charge.				Remarks.
						Rate.		Amount.	When payable.	
						Int.	S.F.			
	£	£		£	£	£ c.	£ c.	£		
New Zealand Loan Act, 1863	...	266,300	15 July, 1914	130,055	136,245	5	1	15,978	15 Jan. and 15 July.	
Consolidated Loan Act, 1867	...	339,300	Ann. drawing	...	339,300	5	...	16,965	Quarterly, 15 Jan., &c.	
Immigration and Public Works Loan Act, 1870	...	*1,000,000	1 June, 1907	657,322	342,678	4	2·4	64,000	1 June and 1 Dec.	Sinking Fund payable 13 Mar. and 13 Sept.
Canterbury Loan Ordinance, 1862	3,800 12,200	16,000	2 Jan., 1915 2 July, 1916	12,725	3,275	6	1	1,120	30 June and 31 Dec.	
Otago Loan Ordinance, 1862	...	400	1 July, 1898	...	400	...	...	...	...	Debentures not presented for payment.
Consolidated Loan Act, 1867	...	13,000	15 April, 1913	..	13,000	4	...	520	15 April and 15 Oct.	
Immigration and Public Works Loan Act, 1870	363,000 27,900	390,900	15 April, 1913 15 April, 1913	... ...	363,000 27,900	4 4½	... ...	14,520 1,256	15 April and 15 Oct. 15 April and 15 Oct.	
Defence and other Purposes Loan Act, 1870	25,000 75,000	100,000	1 July, 1910 15 April, 1913	... ...	25,000 75,000	4½ 4	... ...	1,125 3,000	30 June and 31 Dec. 15 April and 15 Oct.	
General Purposes Loan Act, 1873	17,400 10,800 54,700	82,900	15 Oct., 1913 15 May, 1914 28 Nov., 1914	... ...	17,400 10,800 54,700	4 4 5	... ...	696 432 2,735	15 April and 15 Oct. 15 May and 15 Nov. 15 May and 15 Nov.	
District Railways Purchasing Acts, 1885–86	40,000 97,100	137,100	1 July, 1909 1 April, 1905	... ...	40,000 97,100	6 4	... ...	2,400 3,884	1 April and 1 Oct.	

Government Loans to Local Bodies Act, 1886	...	109,100	1 Sept., 1907	...	109,100	3½	1½	26,782†	1 Mar. and 1 Sept.
Consolidated Stock Act, 1877	29,150,302 6,161,167 6,148,810	41,460,279	1 Nov., 1929 1 Jan., 1940 1 April, 1945	... ...	29,150,302 6,161,167 6,148,810	4 3½ 3	... ...	1,166,012 215,641 184,464‡	1 May and 1 Nov. 1 Jan. and 1 July. 1 April and 1 Oct.
Consolidated Stock Act, 1884—									
Colonial Issue ...	157,500 509,500	667,000	1 Sept., 1905 31 Dec., 1907	... ...	667,000	3½*	...	23,345	1 Mar. and 1 Sept.
Naval and Military Settlers' and Volunteers' Land Act, 1892	...	30	31 Oct., 1899	...	30§	...	...	...	...
Native Land Purchases Act, 1892 (Renewed under the Aid to Public Works and Land Settlement Act, 1899)	...	125,000	31 Oct., 1906	...	125,000	3½	...	4,375	30 April and 31 Oct.
Land for Settlements Act, 1892 (Renewed under the Land for Settlements Acts Amendment Act, 1899)	...	45,276	31 Oct., 1906	...	45,276	3½	...	1,585	30 April and 31 Oct.
Land for Settlements Acts, 1894, 1897, 1899, and 1900	769,490 349,000 62,000 ... 300,000 56,000 200,000 19,000	1,755,490	31 Oct., 1906 1 April, 1909 1 April, 1909 ... 1 April, 1902 1 April, 1905 ... 30 June, 1901	... ...	769,490 349,000 62,000 ... 300,000 56,000 200,000 19,000	3½ 3½ 3½ ... 4 4 4 2½	... ...	26,932 13,088 2,170 ... 12,000 2,240 8,000 475	30 April and 31 Oct. 1 April and 1 Oct. 1 April and 1 Oct. ... 1 April and 1 Oct. 1 April and 1 Oct. ... 30 June
Lands Improvement and Native Lands Acquisition Act, 1894	...	400,000	30 Sept., 1908	...	283,000 117,000	4 3½	... ...	11,320 4,095	31 Mar. and 30 Sept. 31 Mar. and 30 Sept.
New Zealand Consols Act, 1894	...	459,389	1 Feb., 1910	...	459,389	3½	...	16,079	1 Feb. and 1 Aug.
Carried forward ...	...	47,367,464	...	800,102	46,567,362	...	...	1,847,234	

† The Sinking Fund is payable on £1,530,900; the Land Assurance Fund is also charged with ½ per cent. as a contribution towards Sinking Fund.

‡ £67,200 of this amount will be recouped by the Government Advances to Settlers Office.

§ Debentures not presented for payment.

* Only £200,000 has actually been issued to the public; the unsold debentures are available for the purpose of obtaining temporary advances from time to time.

PUBLIC DEBT ON 31ST MARCH, 1900—*continued.*

—	Amount Outstanding.		Due Date.	Sinking Funds Accrued.	Net Indebtedness.	Annual Charge. Rate. Int.	Rate. .F.	Amount.	When payable.	Remarks.
	£	£		£	£	₱ c.	₱ c.	£		
Brought forward ...	...	47,367,464	...	800,102	46,567,362	...	...	1,847,234		
Aid to Public Works and Land Settlement Acts, 1896, 1897, 1898, 1899, and 1900	250,000	2,089,000	1 Feb., 1902	...	250,000	3½	...	8,750	1 Feb. and 1 Aug.	* Loan may be paid off at any time after 15th February, 1907, on six months' notice being given.
	500,000		15 Aug., 1921*	...	500,000	3½	...	17,500	15 Feb. and 15 Aug.	
	15,000		31 Oct., 1903	...	15,000	3½	...	525	1 Feb. and 1 Aug.	
	150,000		4 Jan., 1904	...	150,000	3½	...	5,250	1 Feb. and 1 Aug.	
	100,000		15 Jan., 1905	...					23 April and 23 Oct.	
	100,000		15 Feb., 1905	...					23 April and 23 Oct.	
	100,000		15 Mar., 1905	...					23 April and 23 Oct.	
	100,000		17 April, 1905	...					23 April and 23 Oct.	
	100,000		15 May, 1905	...					23 April and 23 Oct.	
	100,000		15 June, 1905	...	1,165,000	†	...	40,775	31 Mar. and 30 Sept.	† ¼ per cent. over bank rate; varying interest, calculated at 3½ per cent.
	100,000		16 July, 1905	...					31 Mar. and 30 Sept.	
	100,000		15 Aug., 1905	...					31 Mar. and 30 Sept.	
	100,000		15 Sept., 1905	...					31 Mar. and 30 Sept.	
	65,000		15 Oct., 1905	...					31 Mar. and 30 Sept.	
	100,000		21 Nov., 1905	...					31 Mar. and 30 Sept.	
	100,000		22 Dec., 1905	...					31 Mar. and 30 Sept.	
Dairy Industry Act, 1898	438	1,781	1 Aug., 1908	...	1,781	3½	...	62	1 Feb. and 1 Aug.	‡ Treasury bills amounting to £700,000 are not included.
	843		1 Jan., 1911	...						
	500		1 Jan., 1916	...						
Government Advances to Settlers Act, 1894	25,000	140,000	1 Nov., 1905	...	50,000	4	...	2,000	31 Mar. and 30 Sept.	
	25,000		1 Dec., 1905							
	30,000		1 Feb., 1906							
	30,000		28 Feb., 1906	...	90,000	3½	...	3,150	31 Mar. and 30 Sept.	
	30,000		20 Mar., 1906							
Government Accident Insurance Act, 1898	...	2,000	1 Feb., 1911	...	2,000	3½	...	70	1 Feb. and 1 Aug.	§ Represents the accrued Sinking Fund in respect of the total amount issued under "The Government Loans to Local Bodies Act, 1886," of which £1,421,800 has been converted into Consolidated Stock debentures.
					48,791,143					
Less accrued Sinking Fund in respect of "The Government Loans to Local Bodies Act, 1885"	...	...	...	233,392§	233,392					
Totals	...	49,591,245‡	...	1,033,494	48,557,751	...	...	1,925,316		

Net Indebtedness: Comparison with past Years.

The net public debt, after deducting the accrued sinking fund (£1,033,494), was on 31st March, 1901, £48,557,751, an increase of £1,627,427 during the year. More than eight years' revenue, ordinary and territorial, at the present rate would thus be required to pay off the net debt of the colony. The net indebtedness per head of population for 1900–1901 is greater than in 1899–1900 by 19s. 7d. In March, 1890, it stood at £60 5s. 3d.; in 1891, £59 11s. 10d.; in 1892, £59 2s.; in 1893, £58 2s. 7d.; in 1894, £57 8s. 10d.; in 1895, £57 9s. 9d.; in 1896, £60 2s. 4d.; in 1897, £60 13s. 9d.; in 1898, £60 4s. 11d.; in 1899, £61 14s. 4d.; in 1900, £61 17s. 3d.; and in 1901, £62 16s. 10d. But, when considering the increase of the amount of debt per head as a burden on the people, regard should be paid to the effect of conversions on the amounts paid by way of charges of the public debt out of the revenue year by year. Remarks on this subject are made, and figures given, further on, under the head of interest and sinking funds; also previously under revenue, which is shown to have been relieved substantially since the year 1890.

Years ended 31st March.	Estimated or Census Population.	Amount of Debentures and Stock in Circulation.	Gross Indebtedness per Head of European Population.	Amount of Sinking Fund accrued.	Net Indebtedness.	Net Indebtedness per Head of European Population.
		£	£ s. d.	£	£	£ s. d.
1890 ..	618,657	38,667,950	62 10 1	1,386,185	37,281,765	60 5 3
1891 ..	626,658	38,830,350	61 19 4	1,487,042	37,343,308	59 11 10
1892 ..	637,472	38,713,068	60 14 8	1,037,862	37,675,206	59 2 0
1893 ..	656,187	39,257,840	59 16 7	1,113,770	38,144,070	58 2 7
1894 ..	676,747	39,826,415	58 17 0	951,924	38,874,491	57 8 10
1895 ..	689,475	40,386,964	58 11 6	751,932	39,635,032	57 9 9
1896 ..	703,187	43,050,780	61 4 5	778,891	42,271,889	60 2 4
1897 ..	717,649	44,366,618	61 16 5	814,294	43,552,324	60 13 9
1898 ..	731,713	44,963,424	61 9 0	881,903	44,081,521	60 4 11
1899 ..	746,673	46,938,006	62 17 3	857,279	46,080,727	61 14 4
1900 ..	758,616	47,874,452	63 2 2	944,375	46,930,077	61 17 3
1901 ..	772,719	49,591,245	64 3 7	1,033,494	48,557,751	62 16 10

The debt of the colony as above stated does not include the unpaid loans raised by the several local bodies, amounting at the end of March, 1900, to £7,057,350 of which sum £5,478,300 was raised outside the colony. These are referred to in dealing with the finance of local bodies.

Increase of Gross Public Debt.

The increase of the gross public debt since the 31st March, 1891, amounts to £10,760,895. A schedule of items composing this sum is subjoined. It shows the purposes to which the money raised has been or is being devoted. The second largest item is £2,380,000 raised for advances to settlers, which represents investments by the Government bearing interest and lent on continually improving security, the principal being repaid by instalments.

Other items which may be considered to represent interest-bearing investments are those under the heads "Land Settlement," "Native Land Purchases," "Loans to Local Bodies," "Lands Improvement," "N.Z. Consols," and "Bank of N.Z. Preferred Shares."

	£	£
Gross Public Debt, 31st March, 1901		49,591,245
31st March, 1891		38,830,350
Increase		£10,760,895
Native Land Purchases	649,700	
Land Settlement (including Cheviot)	2,075,566	
Loans to Local Bodies	1,205,900	
Lands Improvement	500,000	
Advances to Settlers	2,380,000	
Bank of N.Z. Preferred Shares	500,000	
N.Z. Consols	459,389	
District Railways	47,000	
Public Works	2,535,000	
Increase by Conversions	646,312	
Sinking Fund Accretions	1,407,700	
Naval and Military Settlers	27,226	
Government Accident Insurance	2,000	
Advances to Dairy Companies	1,781	
		£ 12,437,574
Less Redemptions—		
Consolidated Stock Act, 1884, Debentures	1,260,420	
Other Debentures	416,259	
		1,676,679
Total net increase		£10,760,895

Interest and Sinking Fund.

Of the total amount of outstanding public debt at the end of March, 1901—viz., £49,591,245—more than thirty-one millions sterling bore interest at the rate of 4 per cent., over ten millions sterling at 3½ per cent., and more than six millions sterling at 3 per cent. The following are the rates of interest payable on the complete public debt:—

Rates of Interest.	Amount at each Rate. £
6 per cent.	56,000
5 per cent.	660,300
4½ per cent.	52,900
4 per cent.	31,615,602
3¾ per cent.	349,000
3½ per cent.	10,689,203*
3 per cent.	6,148,810
2½ per cent.	19,000
Nil	430†
Total	£49,591,245

* Including £1,165,000 on which the interest paid was one quarter per cent. over bank rate: varying rate averaging 3½ per cent. † Debentures not presented for payment.

The total amount of *interest* payable to bondholders on the full amount of the public debt as quoted above is £1,875,530, which gives an average rate of £3 15s. 7d. per £100. On the total public debt outstanding on the 31st March, 1891, the average interest charge was £4 10s. 3d. per £100. During the period 1891–1901, therefore, the average rate is found to have declined nearly 16 per cent.

The above refers to interest payable to bondholders only, and has nothing to do with sinking fund requirements, which are included in the whole annual charge of the public debt.

The *actual payments* during seven years for interest *and sinking fund out of the Consolidated Fund* are shown hereunder, together with the percentage of ordinary and territorial revenue absorbed by the public debt charges:—

Year ended 31st March.	Amounts actually paid for Interest and Sinking Fund out of the Consolidated Fund.					Rate per Head of Mean Population.	Percentage of Revenue absorbed by Public Debt Charges.
	Public Debt.			Treasury Bills.	Total.		
	Interest.	Sinking Fund.	Total.	Interest.			
	£	£	£	£	£	£ s. d.	
1895 ..	1,619,925	57,979	1,677,904	38,985	1,716,889	2 10 3	38·96
1896 ..	1,602,933	41,183	1,644,116	39,659	1,683,775	2 8 4	36·96
1897 ..	1,630,577	41,858	1,672,435	37,034	1,709,469	2 8 2	35·62
1898 ..	1,668,697	43,380	1,712,077	29,336	1,741,413	2 8 1	34·28
1899 ..	1,689,749	44,651	1,734,400	33,068	1,767,468	2 7 10	33·61
1900 ..	1,674,618	46,073	1,720,691	28,703	1,749,394	2 6 6	31·07
1901 ..	1,671,552	46,364	1,717,916	27,700	1,745,616	2 5 6	29·83

NOTE.—The alteration made in 1894-95 of the system which previously obtained in dealing with the drawing loan of 1867 has affected the comparison of the figures for the last six years with those preceding, The total amount actually paid for interest and sinking fund in 1889-90 was, under the old system, £1,897,602. The figures for each of the years ended March, 1890 to 1894 inclusive, will be found in the Year-book for 1899.

The above amounts shown as interest and sinking fund do not comprise the whole of the interest and sinking fund paid by the Government in respect of moneys raised by the issue of loans. Thus, £50,910 of interest was recouped to the Consolidated Fund in respect of debentures issued under the Lands for Settlement Acts during the year ended 31st March, 1901, besides other amounts in previous years. The Cheviot estate account paid £8,866 of interest during the same year, and the Advances to Settlers account paid £66,007 interest on loans during 1900–1901. It may be mentioned that the Cheviot estate was purchased out of loan moneys, and that large sums are yearly being raised for the purchase of lands for close settlement. Loans are also effected from time to time for the purpose of making advances to settlers. The interest on loans for these purposes is made a charge upon and is paid out of the Consolidated Fund in the first instance, but the money is recovered from the receipts derived from the leasing of the lands or from instal-

ments paid by borrowers, and consequently the interest does not become a burden upon the taxpayer, and is therefore not included in the figures upon which the rate per head of mean population is calculated.

The amount actually paid for interest and sinking fund out of the Consolidated Fund during 1900–1901 was £3,778 less than that for the previous year, and the rate of charge per head of population decreased somewhat, notwithstanding the increase of the public debt by no less than £1,716,793.

The lowering of the burden on the revenue of the Consolidated Fund by the lessened charges of the public debt is shown in the last column of the table.

The securities in which the sinking funds were held, as on the 31st March, 1901, are specified in the statement following:—

STATEMENT of the SECURITIES in which the SINKING FUNDS of the several LOANS were invested on the 31st March, 1901.

Investments in—	£	s.	d.
New Zealand 5-per-cent. Debentures	3,470	0	0
" 4½-per-cent. Debentures	1,700	0	0
" 3½-per-cent. Debentures	1,250	0	0
" 4-per-cent. Inscribed Stock	127,483	17	0
" 3½-per-cent. Inscribed Stock	2,571	8	7
County of Tauranga 5-per-cent. Debentures	60	0	0
Borough of Brunner 6-per-cent. Debentures	840	0	0
Borough of Hokitika 6-per-cent. Debentures	1,860	0	0
Borough of Patea 4½-per-cent. Debentures	200	0	0
Borough of Tauranga 5-per-cent. Debentures	200	0	0
Westport Harbour Board 4-per-cent. Debentures	550	0	0
Waimakariri-Ashley Water-supply Board 5-per-cent. Debentures	320	0	0
Wellington and Manawatu Railway Company 5-per-cent. Debentures	540	0	0
Government Loans to Local Bodies 3½ per-cent. Debentures	400	0	0
Mortgages	98,100	0	0
New South Wales 4-per-cent. Debentures	20,800	0	0
New South Wales 4-per-cent. Stock	5,486	6	7
New South Wales 3½-per-cent. Stock	84,269	13	4
New South Wales 3-per-cent. Stock	52,942	12	9
Victoria 4-per-cent. Debentures	15,000	0	0
Victoria 4-per-cent. Stock	43,233	17	4
Victoria 3½-per-cent. Stock	83,341	9	6
Victoria 3 per-cent. Stock	16,746	17	7
South Australia 4-per-cent. Debentures	24,700	0	0
South Australia 4-per-cent. Stock	4,851	0	5
South Australia 3½-per-cent. Stock	38,068	11	6
South Australia 3-per-cent. Stock	109,321	2	8
Canada 4-per-cent. Debentures	18,200	0	0
Canada 4-per-cent. Stock	60,000	0	0
Canada 3½-per-cent. Stock	34,022	11	8
Canada 3-per-cent. Stock	32,670	17	3
Canada 2½ per-cent. Stock	13,666	15	11
	896,866	17	1
Cash balance on 31st March, 1901	136,626	17	0
Total	£1,033,493	14	1

Flotation of Loans.

Of the gross public debt of the colony outstanding on 31st March, 1901, £44,497,279 were raised in London, £181,600 in Australia, and £4,912,366 in New Zealand; and of the total amount £41,919,668 were inscribed stock and £7,671,577 debentures. Details are given hereunder.

Kind of Stock.	Floated in London.	Australia.	New Zealand.	Total.
Debentures ..	3,037,000	181,600	4,452,977	7,671,577
Inscribed Stock ..	41,460,279	..	459,389	41,919,668
Total ..	44,497,279	181,600	4,912,366	49,591,245

Prices of New Zealand Stock.

The highest and lowest London prices for the New Zealand 4, 3½, and 3-per-cent. stock, taken over a range of thirteen years, are quoted:

QUOTATIONS, NEW ZEALAND STOCK.

Year	4 per Cents. Highest.	4 per Cents. Lowest.	3½ per Cents. Highest.	3½ per Cents. Lowest.	3 per Cents. Highest.	3 per Cents. Lowest.
1888	104½	96½	..	..	..	..
1889	109¼	99⅝	..	..	..	..
1890	109⅛	102¼	98⅜	93½	..	..
1891	107½	100	98¼	91⅜	..	..
1892	106⅝	100	98	91½	..	..
1893	107¼	97	97⅓	90	..	..
1894	109⅞	105⅜	103½	96¼	..	..
1895	113½	105⅜	107½	100	95¾	91
1896	118¼	106½	110⅜	101½	103½	90
1897	117	112⅜	111	104¾	102	99⅓
1898	116⅞	108	109⅞	103	101½	96½
1899	116½	105½	109	102	99¼	94¼
1900	113¼	109	106¾	103⅜	98½	95¼

Prices of Australasian Stock.

The prices of stock of the Australasian Colonies in London for the years 1893 and 1897 show the position as affected by the financial and banking crisis in the former year, and the improvement that had taken place since 1893 and as late as 1897.

Colony.	Year when Stock Redeemable.	Prices, 1893.* Highest.	Prices, 1893.* Lowest.	Prices, 1897. Highest.	Prices, 1897. Lowest.
	4 PER CENTS.				
Queensland	1915-24	103½	89	116	111
New South Wales	1933	111	97½	123¾	117½
Victoria	1920	103½	95	115	111⅛
South Australia	1917-36	105⅜	93	114½	111¼
Western Australia	1934	107½	102	123¾	120
Tasmania	1911†	102⅞	97¼	110	105
New Zealand	1929	107¼	97	117	112⅜
	3½ PER CENTS.				
Queensland	1924	92¼	75	108½	104⅝
New South Wales	1924	97⅛	83½	111½	107¾
Victoria	1923	93⅜	79‡	108⅜	104¼
South Australia	1939	96	85½	113½	109¾
Tasmania	1920-40§	96	84	111⅛	105½
New Zealand	1940	97½	90	111	104¾

* Figures taken from Victorian Year-book, 1894.
† Debentures. ‡ Rate for week ending 19th May, time of Australian banking crisis.
§ At any time on or after 1st January, 1920, on giving twelve months' notice

Public Debt of Australasian Colonies, &c.

The following figures, which, with the exception of those for New Zealand, are taken from Mr. Coghlan's Australasian Statistics, show the public debt of each colony in 1899 or 1900:—

Colony.	Date.	Public Debt.			Debt per Head of Population		
		Fixed Debt.	Floating Debt.	Total.			
		£	£	£	£	s.	d.
Queensland ..	30 June, 1900	34,348,414	1,000	34,349,414	70	7	9
New South Wales	30 June, 1900	61,801,409	3,531,584	65,332,993	48	0	0
Victoria ..	30 June, 1900	48,024,885	1,300,000	49,324,885	42	4	6
South Australia ..	30 June, 1900	26,131,780	..	26,131,780	70	15	0
Western Australia	30 June, 1900	9,874,640	1,800,000	11,674,640	65	10	4
Tasmania ..	31 Dec., 1899	8,271,967	141,727	8,413,694	46	3	1
New Zealand ..	31 Mar., 1900	47,874,452	..	47,874,452	63	2	2*

* As shown previously (see page 405), the amount of accrued sinking fund reduces this by more than £1 per head.

The amount of indebtedness per head of population in June, 1900, in South Australia, Western Australia, and Queensland was thus greater than that for New Zealand in March, 1900.

Public Works in New Zealand.

The burden of a public debt depends greatly on the measure in which it is expended on reproductive works, and on the degree of prosperity enjoyed by the people. The generally rugged character of this country, and the natural difficulties appertaining to the sites of many of the towns, soon necessitated a large outlay on roads and public works. The need was fully recognised, and to some extent met, by the Provincial Governments, which have justly received great credit for their far-seeing and liberal exertions. A great deal of road-making, often of a very costly character, was accomplished, harbour and other improvements begun, and immigration encouraged. Some railways were made in Canterbury, Otago, and Southland. The City of Christchurch and the Canterbury Plains were connected with the Port of Lyttelton by a railway, which required the construction of a long and very costly tunnel through the intervening range of hills. In Otago, private enterprise, backed by the guarantee of the Provincial Government, built a railway from Dunedin to Port Chalmers, and some miles of line were made in Southland from the town of Invercargill into the interior; but no general and comprehensive scheme of public works could be carried out by the separate exertions of the Provincial Governments. In 1870, therefore, the General Government brought forward its public-works and immigration policy, by which it was proposed to raise a loan of ten millions for the construction of main trunk railways, roads, and other public works of importance to the colony as a whole, as well as for the promotion of immigration on a large scale, the expenditure to be spread over a period of ten years. This policy was accepted by the Legislature, and embodied in "The Immigration and Public Works Act, 1870."

The demands for local railways and other works soon caused the original proposals to be exceeded, and entailed an expenditure at a much more rapid rate and to a far greater amount than was originally contemplated. Although many of the works undertaken have been directly unremunerative, yet the effect of the policy, as a whole, has been largely to develop the settlement of the country, and to increase enormously the value of landed property; land, in parts which before the construction of railways was valued at from £1 to £2 per acre, having been subsequently sold at prices varying from £10 to £20 per acre. Moreover, the railway and telegraph-lines yield a revenue which covers a large portion of the interest on their cost after paying working-expenses.

Utilisation of Money composing Public Debt.

A statement is supplied based on figures taken from the Colonial Treasurer's Budget of 1897 (to which the necessary additions have been made), showing the purposes for which the money forming the public debt of the colony was raised or voted.

But the amounts in the items must be regarded as only approximations to the actual facts. The information is merely indicative of the truth, and is a revision of what was given in the Year-book, 1899, which was found to be not as near to correctness as possible in places.

PUBLIC DEBT OF NEW ZEALAND, MARCH, 1901, SHOWING APPROXIMATELY THE AMOUNTS RAISED OR VOTED UNDER VARIOUS HEADS, ARRANGED IN THREE CLASSES.

		On 31st March, 1901. £
(*a.*)	Railways	16,064,000*
	Lands improvement (roads and bridges)	4,790,000
	Public works and buildings	3,883,000
	Land-purchases	2,168,000
	Immigration	2,459,000
	Maori war	2,357,000
	Defence	1,698,000
	Telegraphs	875,000
	Goldfields and coal-mines	744,000
	Lighthouses and harbours	502,000
(*b.*)	Advances to settlers	2,380,000
	Loans to local bodies	1,485,000
	Purchase of lands for settlement	2,075,000
	Bank of New Zealand preferred shares	500,000
	New Zealand Consols deposits	460,000
(*c.*)	Deficiencies in revenue, charges and expenses of raising loans, provincial liabilities, and miscellaneous expenditure	7,160,000

* NOTE.—Only a portion of expenditure of old Provincial Governments on railways became public debt of the colony. The total expenditure on railways (Provincial and General Government), to 31st March, 1901, was over eighteen millions sterling, which includes £1,104,281 spent by the Provincial Governments, of which £82,259 was for the Dunedin and Port Chalmers line.

It will be found that on the 31st March, 1901, out of a total debt of £49,591,245 the amounts allocated for services formed approximately the following proportions of the whole :—

For Railways	32·36	For Maori war	4·75
„ Lands improvement (roads and bridges)	9·66	„ Defence..	3·41
„ Public works and buildings	7·83	„ Telegraphs	1·76
„ Land-purchases	4·37	„ Goldfields and coal-mines..	1·50
„ Immigration	4·96	„ Lighthouses and harbours	1·01

The total sum is divided into three classes in the table, of which (*a.*) is composed of the various services above referred to, and the total of which forms 71·65 per cent. of the whole debt in 1901. Class (*b.*) consists of moneys devoted to what may be termed investments, being 13·91 per cent. of the total; (*c.*) moneys paid away in charges and expenses of raising loans, also to meet deficiencies of revenue, besides old provincial liabilities, and miscellaneous expenditure, forming 14·44 per cent. of the debt.

The figures given as to railways do not include all the sums spent by the Provincial Governments, as stated in the note to the table, nor do the figures in some other items agree with those given elsewhere, made up from tables showing the expenditure out of the Public Works Fund, which, as previously explained, is augmented by contributions from the Consolidated Revenue Account.

Expenditure out of "The Public Works Fund."

The net expenditure, under all heads, of the Public Works Fund from 1870 to the 31st March, 1901, can be given correctly, but this fund, as stated previously, is not altogether composed of money charged to the Public Debt. It had received £30,854,187 from loans and £3,665,976 by way of receipts in aid on the latter date. The money received by way of aid included £2,705,000, transferred from the Consolidated Fund during the last ten financial years, out of surplus revenue. Thirty-four millions sterling were spent since the year 1870 up to March last, and the items given below exhibit the nature of the works, &c., with amount for each.

NET EXPENDITURE OF PUBLIC WORKS FUND FROM 1870 TO 31 MARCH, 1901.

Expenditure on—	£
Immigration	2,147,719
Public Works, Departmental	459,317
Railways, including Surveys of New Lines ..	17,168,026
Roads	5,563,949
Land Purchases	1,964,970
Development of Goldfields	686,353
Telegraph Extension	906,158
Public Buildings	2,509,650
Lighthouses, Harbour-works, and Defences ..	965,613
Contingent Defence	549,960
Rates on Native Lands	64,226
Thermal Springs	14,600
Charges and Expenses of raising Loans ..	1,057,771
Coal-mines	10,835
Interest and Sinking Fund	218,500
Total	34,287,647

Expenditure on Railways.

The expenditure on railway-works has been kept within comparatively narrow limits during the last few years. The railway expenditure during each of six quinquennial periods and for the year ended 31st March last since the initiation of the public-works policy has been as follows:—

	£
1st July, 1870, to 30th June, 1875	3,575,362
1st July, 1875, to 31st March, 1880	4,919,712
1st April, 1880, to 31st March, 1885	3,120,680
1st April, 1885, to 31st March, 1890	2,308,319
1st April, 1890, to 31st March, 1895	978,498
1st April, 1895, to 31st March, 1900	1,547,732
1st April, 1900, to 31st March, 1901	717,723
Total	17,168,026

The diminution in expenditure has necessarily involved proceeding with the railways at a slower rate, and New Zealand's expenditure on railways is now, with one exception, that of Tasmania, the lowest per head of the population of any of the Australasian Colonies. The following table shows the cost of railway-works, the mileage, the average cost per mile, the population, and the cost per head of the population in the several colonies referred to:—

Colony.	Year ended	Cost of Construction of Open Lines.	No. of Miles of Line open.	Average Cost per Mile.	Estimated Population	Cost per Head of Population
		£		£		£ s. d.
Queensland ..	31 Dec., 1899	19,110,725	2,800	6,825	512,600	37 5 8
New South Wales	30 June, 1900	38,477,269	2,811½	13,687	1,361,100	28 5 5
Victoria ..	30 June, 1899	38,974,410	3,127	12,464	1,176,800	33 2 5
South Australia*	30 June, 1899	14,042,043	1,869½	7,512	370,000	37 19 0
West'n Australia	30 June, 1900	6,856,363	1,355	5,060	178,100	38 9 11
Tasmania ..	31 Dec., 1899	3,604,222	445½	8,095	182,500	19 15 0
New Zealand ..	31 Mar., 1900	16,703,887	2,104	7,939	758,600	22 0 5

* Including Northern Territory.

In the foregoing table the cost per head of population for railway-construction is shown to have been between thirty-three and thirty-eight pounds sterling in the Colonies of Victoria, Queensland, South Australia, and Western Australia; in New South Wales it was over twenty-eight pounds; but in New Zealand the cost has been but twenty-two pounds and in Tasmania a little over nineteen pounds per head of population.

SUPPLEMENTARY.

The Assets Realisation Board.

On page 226 reference is made to the establishment of an Assets Realisation Board for the purchase, in connection with the affairs of the Bank of New Zealand, of all the assets of the Estates Company and of the Auckland Agricultural Company.

The General Manager reports that during the year ended 31st March last (1901) sales have been smaller in volume and value than for the previous year, especially in regard to country properties, the demand for which, except in dairying districts, has eased off considerably, in consequence, no doubt, of the shortening of resources of would-be purchasers, due to shrinkage in value of produce and the local advance in prices for stock. The transactions embrace 34,911 acres of country lands realising £78,794, and town and suburban lands and sundries to the value of £22,917.

Distinguishing amounts realised on land from amounts received on account of stock and implements, the sales for the year show the following results:—

	£
Land	92,451
Stock and implements on properties finally realised..	9,260
	£101,711

The sales for the period 1895–1901, including stock, show a total of £685,282 received.

On 31st March, 1901, the proportion of total sales from time of starting to the book-cost of all estates (£2,731,706) was 25·0; and to land-tax valuation, plus 10 per cent. for sundry properties, with the manager's valuation for station properties (which together total £1,895,179), it was 36·10.

Particulars of operations are—

	£
Sales of properties finally realised, 1895–1901 (including stock)	387,163
Properties partially realised, 1895–1901	298,119
	£685,282

The book-cost of the estates in respect of which the sales were finally closed was £567,665. These properties are shown above to have realised £387,163, leaving a deficiency of £180,502, including the realisation expenses, &c.

The localities of the sales are as follows :—

	Estates.	Farms.	Town Sections.	Suburban Sections.	£
Auckland ..	5	128	571	216	216,848
Canterbury ..	3	66	18	63	222,064
Hawke's Bay ..	1	..	9	..	16,022
Otago	2	9	565	112	67,163
Marlborough ..	1	4	64	6	20,014
Wellington		17	30	1	88,981
					631,092
Proceeds; realisation of sundry assets					7,868
Stock sales on properties finally realised					46,322
					£685,282

SPECIAL BANKING LEGISLATION.

A SYNOPSIS of the Banking Acts under which guarantees have been given by the Government of New Zealand will be found on pages 224 to 227 *ante*.

SECTION XX.—CROWN LANDS.

A SUMMARY of the transactions during the year ended 31st March, 1901, will be found in the following table, which shows under all descriptions of tenure the number of selectors and the area selected :—

Nature and Tenure of Lands selected during the Year ended the 31st March, 1901.	Selectors.	Area. A. R. P.	Number of Purchasers or Selectors.	Area. A. R. P.
Town lands sold for cash	171	224 1 20	362	58,700 0 37
Suburban lands sold for cash ...	26	230 0 0		
Rural lands sold for cash	165	58,245 3 17		
Perpetual lease	...	... ...	3	2,498 3 24
Occupation with right of purchase ...	...	... ...	673	252,728 3 27
Lease in perpetuity	...	... ...	295	97,137 3 38
Agricultural lease	...	... ...	1	24 0 30
Village settlement, cash	...	... ...	35	21 3 36
" lease in perpetuity ...	...	... ...	96	1,082 1 31
Village-homestead special settlement ...	...	... ...	7	375 2 31
Improved-farm special settlement (lease in perpetuity and occupation with right of purchase) ...	...	... ...	13	1,935 2 25
Occupation leases, Mining Act	...	... ...	53	2,122 2 13
Small-grazing-runs	...	... ...	30	82,423 2 6
Pastoral runs	...	... ...	64	1,013,109 1 26
Miscellaneous leases and licenses ...	...	... ...	408	87,712 3 23
Rotorua Thermal Springs District...	...	... ...	36	342 1 27
Cheviot Estate—				
Small grazing runs	...	... ...	1	280 0 0
Miscellaneous	...	... ...	3	167 3 0
Land for Settlements Acts—				
Cash lands	...	... ...	1	2 3 8
Lease in perpetuity	...	... ...	194	47,067 0 34
Lease in perpetuity, village ...	...	... ...	1	0 1 0
Small grazing-runs	...	... ...	4	3,372 3 13
Miscellaneous	...	... ...	32	6,637 2 29
Totals			2,312	1,667,744 1 18

Particulars of the number of Crown tenants at present holding lands under the several tenures, together with the yearly rental payable, are given in the next statement.

STATEMENT showing the TOTAL NUMBER OF CROWN TENANTS, with Area selected or held, and the Yearly Rent payable, as on the 31st March, 1901.

Tenures.	Total Number of Tenants.	Total Area held by such Tenants.	Total Yearly Rental or Instalment payable.
		A. R. P.	£ s. d.
ORDINARY CROWN LANDS.			
Deferred payment	774	111,159 0 9	5,643 6 9
Perpetual lease	1,206	267,576 0 37	9,933 18 0
Occupation with right of purchase	3,137	828,063 0 5	31,272 5 11
Lease in perpetuity	3,029	883,681 3 39	28,723 4 7
Agricultural lease	17	550 1 12	24 2 9
Homestead	1	1,636 1 10	...
Mining Districts Land Occupation Act	271	11,814 1 15	616 16 7
Village settlements—			
Deferred payment	30	638 0 35	74 16 6
Perpetual lease	193	3,402 3 3	496 13 0
Occupation with right of purchase	38	29 1 20	13 2 2
Lease in perpetuity	840	14,062 3 35	1,711 18 7
Village-homestead special settlements—			
Perpetual lease	465	9,740 1 20	1,646 15 10
Lease in perpetuity	135	4,970 3 15	523 19 0
Special settlement associations—			
Deferred payment	20	2,115 3 9	45 19 2
Perpetual lease	25	2,377 3 31	160 2 10
Lease in perpetuity	649	121,120 0 2	6,090 16 7
Improved-farm special settlements—	499	53,638 3 14	2,583 15 8
Small grazing-runs	590	1,155,668 3 8	24,605 1 10
Pastoral runs	901	11,340,645 1 36	74,227 16 2
Miscellaneous leases	2,136	390,602 1 27	10,108 2 10
Totals	14,970	15,206,495 0 22	198,502 14 9
CHEVIOT ESTATE—			
Lease in perpetuity	105	23,909 0 9	6,427 15 2
Village-homestead special settlement	73	2,455 1 0	858 0 4
Grazing-farms	40	45,971 0 9	6,622 14 8
Pastoral runs	2	2,102 0 0	262 3 8
Miscellaneous	70	1,679 3 13	293 17 10
LAND FOR SETTLEMENTS ACTS—			
Lease in perpetuity	1,620	247,798 2 17	74,599 12 9
Lease in perpetuity, village	47	429 1 12	323 14 6
Special-settlement associations	11	2,114 1 9	162 7 8
Small grazing-runs	35	55,025 3 37	6,951 12 6
Miscellaneous	94	6,500 0 33	680 16 8
THERMAL-SPRINGS (ROTORUA)	247	5,754 3 33	1,652 1 4
Grand totals	17,314	15,600,235 2 34	297,337 11 10
Native townships	138	538 2 7	625 11 8

The decennial tables I. and II. exhibit the acreage of land *taken up for settlement*, and the number of holdings under each description of tenure. The lands held under pastoral license and miscellaneous leases, such as for timber and flax-cutting, coal-mining, &c., *are not included* in these tables. Tables III. and IV. show the total acreage taken up year by year since 1891 in each land district, and the number of holdings grouped according to size, the areas varying from less than one acre in extent to 1,000 acres and over.

The forfeitures and surrenders in respect of the lands taken up for settlement (excluding, as already remarked, pastoral and miscellaneous leases) for the last five years were:—

1896-97	815 holdings	228,978 acres.	1899-1900	510 holdings	164,003 acres.
1897-98	638 "	130,389 "	1900-1901	354 "	106,690 "
1898-99	567 "	180,957 "			

Forfeited and surrendered lands are again thrown open for selection as soon as possible, and in the majority of cases are taken up again by fresh selectors within a short time.

A full description of the various tenures under which land is dealt with in the colony is given in the article entitled "The Land System of New Zealand," in Part III. of this book.

I.—Comparative Statement showing Acreage of Lands selected under Settlement Conditions (excluding Pastoral Runs and Miscellaneous Leases and Licenses) during Each of the Years ended 31st March, 1891-1901.

—	1890-91.	1891-92.	1892-93.	1893 94.	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-1901.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Cash lands	100,014	40,501	36,327	34,999	38,695	26,575	28,485	22,525	37,400	23,936	58,700
Deferred payments	34,091	40,467	21,084	12,669	5,454	456	..	..	13	..	..
Perpetual lease and small areas ..	288,917	282,547	122,558	3,854	1,263	1,427	9,106	651	640	624	2,499
Occupation with right of purchase ..	..	..	54,271	108,133	75,478	84,968	59,648	81,414	109,950	117,771	262,729
Lease in perpetuity	..	..	55,320	179,993	91,799	122,350	104,927	117,938	159,415	153,531	144,208
Agricultural lease	551	90	194	365	45	36	13	258	114	70	23
Occupation lease under "The Mining Districts Land Occupation Act, 1894"	..	..	..	..	..	2,931	2,817	1,285	1,449	2,295	2,123
Village settlement—											
Cash	210	429	528	2	24	9	4	1	30	4	22
Deferred payment	370	182	391	..	..	..	..	..	..	..	..
Perpetual lease	954	893	2,636	..	..	..	..	..	..	..	..
Occupation with right of purchase	..	..	..	1	23	2	4	2	2	1	..
Lease in perpetuity	..	..	4	3,953	4,050	3,365	1,317	1,426	2,115	1,762	1,082
Village-homestead special settlement	350	2,213	494	2,550	2,743	793	360	42	134	31	376
Special-settlement associations ..	71	1,923*	157,381†	68,852†	†51,346	†44,237	28,084†	†442	†607	†2	..
Homestead	945	1,010	38	..	..	..	..	..	..	..	..
Special-settlement improved farms ..	..	..	..	..	9,731	28,348	4,882	9,007	4,823	7,393	1,936
Small grazing-runs and grazing-farms	86,161	159,465	92,927	252,693	117,846	46,407	68,934	149,458	77,632	155,109	86,076
Totals	512,634	529,720	544,153	668,064	398,497	361,904	308,581	384,449	394,324	462,529	559,774

* Perpetual lease. † Lease in perpetuity.

Note.—The forfeitures and surrenders for the last five of the years dealt with in the table were—for the year 1896-97, 228,978 acres; 1897-98, 130,380 acres; 1898-99, 160,957 acres; 1899-1900, 164,003 acres; and for 1900-1901, 106,690 acres. But it must not be supposed that these relate to the acreages taken up during the same years; on the contrary, forfeitures may have their origin in selections of long standing and various dates.

II.—Comparative Statement showing Number of Selectors of Land under Settlement Conditions (excluding Pastoral Runs and Miscellaneous Leases and Licenses) during each of the Years ended 31st March, 1891–1901.

—	1890-1.	1891-2.	1892-3.	1893-4.	1894-5.	1895-6.	1896-7.	1897-8.	1898-9.	1899-1900.	1900-1901.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
For cash	573	493	552	497	392	476	388	272	534	491	363
Deferred payments	258	223	169	96	47	6	..	..	1	..	..
Perpetual lease and small areas	788	824	385	17	3	7	19	2	1	2	3
Occupation with right of purchase	..	..	161	461	398	431	277	380	458	395	673
Lease in perpetuity	..	..	126	612	372	696	659	599	675	647	489
Agricultural lease	4	2	4	5	2	3	2	5	2	3	1
Occupation lease under "The Mining Districts Land Occupation Act, 1894"	..	..	..	..	..	69	48	23	31	64	53
Village settlement—											
Cash	87	88	75	3	23	16	4	2	21	6	35
Deferred payment	51	23	29	..	..	..	..	..	..	..	..
Perpetual lease	56	59	164	..	..	..	..	..	..	..	..
Occupation with right of purchase	..	..	..	5	30	3	4	2	3	3	..
Lease in perpetuity	..	..	2	203	232	193	102	92	106	80	97
Village-homestead special settlement	10	140	33	118	60	19	18	9	12	6	7
Special-settlement associations	2	13	838	290	262	238	142	5	5	1	..
Homestead	9	8	1	..	..	..	..	..	..	..	..
Improved-farm special settlement	..	..	..	..	107	315	45	77	64	41	13
Small grazing-runs and grazing-farms	43	80	39	142	60	32	27	71	40	64	35
Totals	1,881	1,953	2,578	2,454	1,988	2,504	1,735	1,539	1,953	1,803	1,769

Note.—The forfeitures and surrenders for the last five of the years dealt with in the table were—for the year 1896-97, 815 holdings; 1897-98, 658 holdings; 1898-99, 567 holdings; 1899-1900, 510 holdings; and in 1900-1901, 354 holdings. See note to previous table as to the origin of these failures.

III.—Lands taken up under Settlement Conditions during each of the Years ended 31st March, 1892-1901 (exclusive of Pastoral Runs and Miscellaneous Leases and Licenses).*

Land District.	1891-92.	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-1901.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Auckland	105,120	115,454	134,992	99,313	67,831	49,522	56,295	90,160	78,677	201,355
Hawke's Bay	36,008	49,831	24,356	20,141	16,353	22,858	19,876	36,222	36,451	90,625
Taranaki	55,237	49,064	13,954	35,113	55,850	22,002	16,786	18,867	54,960	71,000
Wellington	82,311	156,297	84,871	49,586	79,478	63,801	48,909	63,746	41,387	48,530
Nelson	12,992	17,797	36,739	34,906	19,421	14,462	13,600	18,673	10,211	18,918
Marlborough	3,016	8,055	8,227	18,353	15,858	20,858	54,581	51,973	74,311	33,063
Canterbury	62,831	12,777	94,861	33,744	14,827	22,654	75,041	52,839	34,218	20,744
Westland	1,010	162	1,346	1,826	1,765	3,865	437	352	792	709
Otago	141,565	90,043	159,050	80,439	70,238	79,212	77,345	40,599	68,436	49,901
Southland	29,630	44,673	109,668	25,076	20,283	9,347	21,579	20,893	63,086	24,929
Totals.. ..	529,720	544,153	668,064	398,497	361,904	308,581	384,449	394,324	462,529	559,774

IV.—Holdings taken up under Settlement Conditions during each of the Years ended 31st March, 1892-1901 (exclusive of Pastoral Runs and Miscellaneous Leases and Licenses), classified according to Size.

Size.	1891-92.	1892-93.	1893-94.	1894-95.	1895-96.	1896-97.	1897-98.	1898-99.	1899-1900.	1900-1901.
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Under 1 acre	214	154	176	256	259	154	103	293	345	158
1 to 50 acres	581	727	739	696	719	588	496	571	501	466
51 to 250 acres	617	1,253	933	757	1,198	709	616	633	492	522
251 to 500 acres	255	264	341	169	232	178	197	277	262	333
501 to 1,000 acres	187	104	150	70	70	84	63	128	116	181
1,001 acres and upwards ..	99	76	115	40	26	22	64	51	87	109
Totals.. ..	1,953	2,578	2,454	1,988	2,504	1,735	1,539	1,953	1,803	1,769

* See notes as to forfeitures and surrenders on previous tables.

The following is a statement of the gross amounts collected by Receivers of Land Revenue for the years 1899–1900 and 1900–01 :—

	1899-1900. £	s.	d.	1900-01. £	s.	d.
Territorial revenue	262,228	13	8	270,203	5	9
Lands for settlement	46,354	14	4	72,781	8	2
Cheviot Estate	14,822	15	5	14,166	7	4
State forests	8,845	18	10	14,915	5	3
North Island Main Trunk Railway	8,572	13	3	9,449	7	8
Thermal springs	1,075	12	11	1,650	6	11
Lakes Ellesmere and Forsyth ..	1,693	18	5	1,787	13	9
Crown-grant fees	1,046	5	7	915	17	10
Native townships	238	1	9	505	11	9
Miscellaneous	2,818	17	0	2,433	7	10
Mount Cook Hermitage	534	6	4	358	16	6
Hanmer Sanatorium	875	18	5	1,139	19	10
Government loans to local bodies ..	15,457	15	10	21,157	5	2
Endowments	16,333	3	6	17,724	16	10
Survey vote	2,344	13	6	2,149	2	8
Totals	£382,943	8	9	£431,338	13	3

SECTION XXI.—LAND FOR SETTLEMENTS.

A FULL description is given, in a special article belonging to Section 1, Part III., of the objects and method of the Land for Settlements Acts, under which the acquirement by Government is authorised, through purchase from private owners, of properties for subdivision into small farms to meet the want felt of Crown lands for disposal in places where they are specially in demand.

The report of the Chairman of the Board of Land Purchase Commissioners on the transactions for the twelve months ended the 31st March, 1901, states:—

Seventy-three estates, of a total area of 315,612 acres, were offered during the year. Of that area, 144,640 acres were declined, not recommended, or withdrawn, leaving 170,972 acres, of which an area of 75,861 acres is under consideration, and an area of 95,111 acres was recommended for purchase. Including with this latter area part of the land offered in the previous year, twenty-nine estates were recommended for purchase, with the result that offers were accepted for fourteen estates, of an aggregate area of 70,961 acres, for the sum of £350,351. Of the other fifteen estates, the owners of nine declined the prices offered, and the owners of six withdrew their lands from offer.

The names of the estates purchased are—part of Karapiro, Hatuma, Mangatoro, Langdale, Mangawhata, Maungaraki, Epuni, Lyndon, Waipapa, Tarawahi, Kohika, Raincliff, Puhuka, part Station Peaks, Earnscleugh. Possession has been given of all these, with the exception of Mangatoro, which is now under sectional survey.

Since the 1st April, 1901, the following estates have been purchased, and are now under subdivisional survey: Toko-ora, 1,500 acres; Rural Section 36278, 618 acres; Kapuatohe, 50 acres; Kaimahi, 100 acres, near Papanui; Kakahu, 2,250 acres; Ringway, 2,308 acres; Glenham, 11,500 acres.

Included in these purchases there is an aggregate of 1,050 acres, in eight different localities, for workmen's homes and small holdings. One-half is presently under survey prior to being offered for selection. Negotiations are in progress for further purchases for these purposes. Considerable difficulty is experienced in acquiring suitable land for workmen's homes near the populous centres, at a price and in position within the reach of those who are to occupy and to travel daily to and from their work, either by rail, bicycle, or on foot.

The Government having decided to take compulsorily the following estates—Forest Gate, 8,250 acres; Kumeroa, 3,600 acres; Kokatahi, 4,993 acres—the necessary notifications have been gazetted and served on the respective owners, as required by statute, preparatory to the claims being heard before the Compensation Court.

Visit of H.R.H. the Duke of Cornwall and York : Government Arch, Auckland.

The total purchases under the Land for Settlements Act since its commencement up to the 31st March, 1901, are ninety-one estates, containing an area of 395,483 acres, at a cost, including liabilities, of £1,888,723 for land. During the three months—1st April to the 30th June, 1901—seven estates were purchased, of an area of 18,330 acres, to cost £93,350 for land.

The Assistant Surveyor-General's report to the Hon. the Minister of Lands on the condition and settlement of the lands acquired and handed over to his department under the above-mentioned Acts gives the particulars of the estates offered for selection as follows:—

At the end of last year there were eight estates which had been acquired, but had not been offered for lease—viz., Whitehall, Aorangi, Northbank, Papaka, Punaroa, Rautawiri, R.S. 36228, and Barnego, containing in all 39,583 acres.

All these estates, excepting Northbank, were opened for selection during the past year, as well as three others which had been acquired during the year—namely, Langdale, Waipapa, and Lyndon, of an area of 17,304 acres, the total area offered being 43,942 acres, which cost £168,193.

Four other estates purchased during the year were not ready for disposal before the 31st of March. They were Earnscleugh, in Otago (part of which is homestead land for the runs, and part is intended for orchards); Maungaraki, in Wellington: Tarawahi, in Canterbury; Hatuma, in Hawke's Bay, an area in all of 28,021 acres. The Northbank Estate, in Marlborough, purchased during the previous year, and containing 13,000 acres, which cost £6,750, is retained for a year to test its auriferous quality, but has been leased in one run to the former owner at £300 per annum, the goldfields revenue also being payable to the account.

The Waipapa freeholds, of 3,655 acres, were utilised as homesteads for a portion of the high-lying pastoral country behind them, but the rent for them has not yet been brought to account.

Of the ten estates opened for selection 41,546 acres in 127 farms and two small grazing-runs, the areas varying from 50 to 2,000 acres, were leased at a rent of £8,174 per annum.

For country lands the demand is very good, as will be seen from the following table, all the lands having been taken up as soon as offered, with the exception of 2,395 acres, part of which is withheld and the remainder hill pasture.

The Hatuma Estate, in Hawke's Bay, offered since the end of the year, containing 25,737 acres, was divided into fifty-eight farms of from 110 to 1,510 acres each, and they were every one leased the first day it was placed in the market. Similarly, Kohika, 3,820 acres; Raincliff, 530 acres; and Mangawhata, 1,226 acres, have all been taken up with the exception of one section in the latter.

The workmen's hamlets were not so readily disposed of, but were taken up after a time, so that now only a few of them contain unlet sections. As a recent instance, the Hamlet of Epuni, within one mile and three-quarters of the Lower Hutt Railway-station, and almost in the neighbourhood of a manufacturing suburb of Wellington, consisting of land of the finest quality for gardens and residences, which was opened for selection on the 25th June, was little competed for, only ten lots out of forty-three offered being selected on the first day. These lots were from ½ acre to 4½ acres.

The Tarawahi Hamlet, about two miles and a half from Cathedral Square, in the City of Christchurch, and only a few chains from a tram-line, was, on the first day, taken up by only eight persons, when thirty-seven families might have founded homes on rich alluvial land fit to grow any garden crop.

The following table gives the several estates offered for the first time, and how they were disposed of:—

ESTATES OFFERED FOR SELECTION DURING 1900–1901.

Land District and Name of Estate.	Area of Estate.	Number o Selectors.	Number of Original Applications.	Area unselected 31st March, 1901.	Annual Rental payable on Lands leased.	Date when offered for Selection.
Auckland—	A. R. P.			A. R. P.	£ s. d.	
Whitehall ...	8,959 0 0	7	14	1,285 2 0	361 4 6	9 Apl., 1900
Wellington—						
Aorangi ...	1,785 0 0	37	363	Nil	1,342 16 10	5 Apl., "
Langdale ...	9,405 0 0	23	45	104 3	1,526 10 4	19 Mar., 1901
Marlborough—						
Waipapa ...	*3,655 0 0	...	...	...	...	25 Feb., "
Canterbury—						
Rautawiri ...	122 3 7	6	68	Nil	135 6 4	19 Apl., 1900
Papaka ...	1,561 2 25	9	385	Nil	947 6 0	19 Apl., "
Punaroa ...	7,029 3 5	17	293	Nil	1,681 16 6	19 Apl., "
Lyndon ...	4,243 3 28	8	50	Nil	849 19 2	5 Mar., 1901
R.S. 36228 ...	100 3 23	1	...	Nil	12 11 4	17 May, 1900
Otago—						
Barnego ...	7,078 2 1	21	65	1,006 0 0	1,316 5 6	15 May, "
Totals ...	43,941 2 9	129	1,283	2,395 2 3	8,173 16 6	

* Taken up as homesteads for five small grazing-runs.

The total number of sections selected during the year out of estates newly offered and from those remaining for selection from previous years is 232.

The arrears of rent due by 280 tenants under the Land for Settlements Act is £8,271, and is £1,078 greater than at the same time in the previous year.

The prime cost of eighty-one estates, containing 331,128 acres, repurchased is £1,710,541, and there was £88,073 expended in incidental expenses, and expenses incurred in incompleted negotiations, in road-making, and in preparing the land for occupation in the smaller areas into which the properties were divided, making a cost to date of £1,798,614.

The lands disposed of are let to 1,789 tenants, at an annual rental of £82,718, and the lands unlet represent an annual rental of £1,910. The yearly value is therefore £84,628.

Excluding the Hatuma Estate (the purchase-money for which was paid at the end of the year but no rents obtained), and the rents of Langdale (the price for which was not paid last year), the rent actually received during the year is equal to about 5 per cent. on the total cost, and the letting-value of the land offered for selection is 5·1 per cent. It must, however, be considered that there has yet to be expended on roads on these estates about £8,361.

Of rural lands open for selection 12,503 acres in forty-one farms are still undisposed of, and there are 233 acres of workmen's hamlets, or land intended for small holdings, in seventy-nine sections, which were not taken up at the end of the year.

The exchanges effected under the Act of 1894, and under section 7 of the Act of 1900, show that 29,295 acres were acquired by the Crown in exchange for 51,434 acres of freehold lands and a sum of £784. These exchanges were of lands in the Marlborough District chiefly, and were arranged to give both parties better boundaries, and also land for home-stations for the utilisation of the high pastoral country in the neighbourhood.

The estates, &c., acquired in each district under the Land for Settlements Acts to the 31st March, 1901, are next shown :—

Name of Estate.	Area acquired. A.	R.	P.
Auckland—			
Fencourt	7,107	0	0
Karapiro	2,334	0	9
Okauia	5,919	1	30
Opouriao	7,604	0	0
Rangiaka	4,004	0	0
Whitehall	8,980	1	0
	35,948	2	39
Hawke's Bay—			
Elsthorpe	9,740	0	0
Hatuma	26,350	0	0
Mahora	1,133	3	0
Mangatoro	19,550	0	0
Pouparae	337	3	4
Raureka	427	2	0
Tomoana	110	2	16
Waimarie	430	1	30
Willows	775	2	0
	58,855	1	10
Wellington—			
Aorangi	1,785	0	0
Epuni	100	3	14
Langdale	9,406	0	0
Mangawhata	1,240	2	36
Maungaraki	421	3	0
Okakea	2,144	3	29
Paparangi	322	3	32
Te Matua	702	0	19
	16,124	1	10
Marlborough—			
Blind River	5,020	0	0
Flaxbourne (part)	404	0	0
North Bank	13,000	0	0
Omaka	3,698	0	0
Puhipuhi	320	0	0
Richmond Brook	5,827	0	0
Starborough	32,385	3	15
Waipapa	3,648	0	0
	64,502	3	15
Westland—			
Poorua	3,230	1	6
Canterbury—			
Albury	19,340	3	38
Arowhenua	4,651	0	12
Ashley Gorge	1,166	0	24
Braco	27	2	0
Epworth	21	0	3
Hekeao	2,209	0	8
Highbank	9,119	3	2
Horsley Down	4,004	1	33
Kapua	574	1	5
Kereta	105	2	16
Kohika	3,864	1	10
Lyndon	4,200	0	0
Marawiti	2,028	2	33
Omihi Stock Reserve ...	20	0	0
Orakipaoa	384	0	31
Otarakaro	39	3	9
Otaio	376	2	30

Name of Estate.	Area acquired. A.	R.	P.
Canterbury—*continued.*			
Pareora	620	2	13
Patoa	7,347	0	38
Pawaho	51	3	18
Papaka	1,561	3	34
Pareora No. 2	8,108	3	29
Puhuka	39	2	11
Punaroa	7,025	1	5
Raincliff (part)	744	0	0
Rautawiri	113	3	37
R.S. 20184	36	2	22
" 2682	6	2	4
" 36469	20	0	0
" 36056	58	0	16
" 36228	100	3	23
" 36231	98	3	30
" 36469 (2)	154	3	2
Roimata	48	3	37
Rosebrook	600	1	8
Station Peak (part) ...	100	0	0
Studholme	107	2	17
Takitu	9,697	3	37
Tamai	40	3	34
Tarawahi	31	3	0
Waikakahi	47,865	1	1
Wharenui	73	1	10
	136,789	0	0
Otago—			
Ardgowan	4,241	0	0
Barnego	7,019	1	39
Earnscleugh	1,152	0	0
Elderslie	11,394	0	21
Janefield	147	0	2
Macrewhenua	11,150	3	38
Makaroao	2,367	3	31
Makaroao Extension ...	2,535	3	0
Momona	218	2	36
Pomahaka	7,462	3	1
Puketapu	509	0	6
Tahawai	69	0	19
Teanaraki	347	3	18
Toka-rahi	11,051	2	9
	59,667	1	18
Southland—			
Beaumont	4,322	3	20
Merrivale	9,598	0	0
Otahu	6,044	0	29
	20,365	0	9

SUMMARY.

Auckland	35,948	2	39
Hawke's Bay	58,855	1	10
Wellington	16,124	1	10
Marlborough	64,502	3	15
Westland	3,230	1	6
Canterbury	136,789	0	0
Otago	59,667	1	18
Southland	20,365	0	9
Totals	395,483	3	27

Of the total area of 395,483 acres acquired to the 31st March, 1901, an area of 218,392 acres was leased to 1,769 selectors, the annual rent payable thereon being £82,718. The area occupied by roads and reserves was about 7,000 acres, the area unlet 12,736 acres, and the balance of about 57,000 acres was, on the above date, under survey and preparation for future selection.

MISCELLANEOUS STATISTICS.

I.—Progress of the Colony, Years 1900 and 1891.

Summary.

		1900.	1891.	Increase.
Population census (exclusive of Maoris) ..		772,719	626,658	146,061
Value of land and improvements—				
Unimproved value	(1898)	84,401,244	75,787,895	8,613,349
Value of improvements ..	(1898)	54,190,103	46,365,297	7,824,806
Land in cultivation—				
Holdings (in cultivation) ..	No.	*62,786	38,083	*24,703
Total area (including sown grasses and land in fallow, but excluding gardens and orchards (43,188 acres) and plantations of forest trees (49,394 acres)) in 1900 ..	Acres	12,636,035	8,462,495	4,173,540
In crops	"	1,486,376	1,285,768	200,608
In sown grasses	"	11,081,912	6,966,218	4,115,694
In fallow	"	67,747	210,509	−142,762
Live-stock—				
Horses	No.	266,245	211,040	55,205
Cattle	"	1,256,680	831,831	424,849
Dairy cows (included above) ..	"	372,416	206,906	165,510
Sheep	"	19,355,195	16,753,752	2,601,443

Auckland Provincial District, 1900-1891.

		1900.	1891.	Increase.
Population census (exclusive of Maoris) ..		175,938	133,159	42,779
Value of land and improvements—				
Unimproved value	(1898)	14,236,611	12,196,424	2,040,187
Value of improvements ..	(1898)	10,538,871	8,830,892	1,707,979
Land in cultivation—				
Holdings	No.	*14,879	8,608	*6,271
Total area (including sown grasses and land in fallow)	Acres	2,013,962	1,165,441	848,521
In crops	"	111,637	70,038	41,599
In sown grasses	"	1,885,068	1,060,741	824,327
In fallow	"	17,257	34,662	−17,405
Live-stock—				
Horses	No.	68,449	42,826	25,623
Cattle	"	338,370	234,306	104,064
Dairy cows (included above) ..	"	75,437	46,182	29,255
Sheep	"	2,079,446	1,500,102	579,344

Note.—The minus sign (−) signifies decrease.

* The comparison is not quite a fair one, as in 1900, holdings of exactly one acre in extent, and certain holdings occupied by Maoris, have been included by the Department of Agriculture, which was not done in 1891.

TARANAKI PROVINCIAL DISTRICT, 1900–1891.

			1900.	1891.	Increase.
Population census (exclusive of Maoris)	..		37,855	22,065	15,790
Value of land and improvements—					
Unimproved value	..	(1898)	4,064,510	2,982,644	1,081,866
Value of improvements	..	(1898)	2,913,888	1,529,045	1,384,843
Land in cultivation—					
Holdings	..	No.	*4,335	2,504	*1,831
Total area (including sown grasses and land in fallow)		Acres	736,264	308,072	428,192
In crops	..	"	22,386	15,380	7,006
In sown grasses	..	"	713,718	291,471	422,247
In fallow	..	"	160	1,221	−1,061
Live-stock—					
Horses	..	No.	17,812	10,915	6,897
Cattle	..	"	211,459	103,356	108,103
Dairy cows (included above)	..	"	83,013	26,951	56,062
Sheep	..	"	508,948	240,471	268,477

HAWKE'S BAY PROVINCIAL DISTRICT, 1900–1891.

			1900.	1891.	Increase.
Population census (exclusive of Maoris)	..		35,424	28,506	6,918
Value of land and improvements—					
Unimproved value	..	(1898)	6,747,043	6,704,820	42,223
Value of improvements	..	(1898)	4,273,864	3,864,044	409,820
Land in cultivation—					
Holdings	..	No.	*3,189	1,913	*1,276
Total area (including sown grasses and land in fallow)		Acres	1,741,703	1,085,454	656,249
In crops	..	"	32,621	36,218	−3,597
In sown grasses	..	"	1,705,691	1,021,277	684,414
In fallow	..	"	3,391	27,959	−24,568
Live-stock—					
Horses	..	No.	18,477	13,480	4,997
Cattle	..	"	105,725	55,009	50,716
Dairy cows (included above)	..	"	13,662	9,039	4,623
Sheep	..	"	3,327,364	2,668,893	658,471

WELLINGTON PROVINCIAL DISTRICT, 1900–1891.

			1900.	1891.	Increase.
Population census (exclusive of Maoris)	..		141,354	97,725	43,629
Value of land and improvements—					
Unimproved value	..	(1898)	16,772,595	12,456,612	4,315,983
Value of improvements	..	(1898)	12,133,570	8,874,970	3,258,600
Land in cultivation—					
Holdings	..	No.	*10,297	5,808	*4,489
Total area (including sown grasses and land in fallow)		Acres	2,581,891	1,508,587	1,073,304
In crops	..	"	91,839	63,313	28,526
In sown grasses	..	"	2,488,265	1,440,893	1,047,372
In fallow	..	"	1,787	4,381	−2,594
Live-stock—					
Horses	..	No.	42,364	30,542	11,822
Cattle	..	"	264,571	155,466	109,105
Dairy cows (included above)	..	"	74,838	30,615	44,223
Sheep	..	"	4,082,415	2,750,461	1,331,954

NOTE.—The minus sign (−) denotes decrease.

* See note on page 426.

MARLBOROUGH, NELSON, AND WESTLAND PROVINCIAL DISTRICTS, 1900–1891.

		1900.	1891.	Increase.
Population census (exclusive of Maoris)—				
Marlborough Provincial District ..		13,326	12,964	362
Nelson Provincial District ..		37,915	35,154	2,761
Westland Provincial District ..		14,506	15,929	−1,423
Value of land and improvements—				
Unimproved value	(1898)	6,851,506	7,395,637	−544,131
Value of improvements ..	(1898)	3,937,702	3,555,449	382,253
Land in cultivation—				
Holdings	No.	*5,203	3,200	*2,003
Total area (including sown grasses and land in fallow)	Acres	923,296	475,860	447,436
In crops	"	73,195	55,431	17,764
In sown grasses	"	848,857	411,199	437,658
In fallow	"	1,244	9,230	−7,986
Live-stock—				
Horses	No.	16,658	15,181	1,477
Cattle	"	61,787	48,816	12,971
Dairy cows (included above) ..	"	19,787	13,759	6,028
Sheep	"	1,659,264	1,631,456	27,808

CANTERBURY PROVINCIAL DISTRICT, 1900–1891.

		1900.	1891.	Increase.
Population census (exclusive of Maoris) ..		143,041	128,392	14,649
Value of land and improvements—				
Unimproved value	(1898)	20,458,825	19,148,867	1,309,958
Value of improvements ..	(1898)	10,132,432	10,073,196	59,236
Land in cultivation—				
Holdings	No.	*11,086	7,563	*3,523
Total area (including sown grasses and land in fallow)	Acres	2,404,786	2,034,813	369,973
In crops	"	612,319	566,153	46,166
In sown grasses	"	1,781,952	1,409,785	372,167
In fallow	"	10,515	58,875	−48,360
Live stock—				
Horses	No.	47,797	47,567	230
Cattle	"	88,665	82,058	6,607
Dairy cows (included above) ..	"	36,568	31,250	5,318
Sheep	"	3,951,008	3,559,533	391,475

OTAGO PROVINCIAL DISTRICT, 1900–1891.

		1900.	1891.	Increase
Population census (exclusive of Maoris) ..		173,145	153,097	20,048
Value of land and improvements—				
Unimproved value	(1898)	15,270,154	14,902,891	367,263
Value of improvements ..	(1898)	10,259,776	9,637,701	622,075
Land in cultivation—				
Holdings	No.	*13,797	8,487	*5,310
Total area (including sown grasses and land in fallow)	Acres	2,234,133	1,884,268	349,865
In crops	"	542,379	479,235	63,144
In sown grasses	"	1,658,361	1,330,852	327,509
In fallow	"	33,393	74,181	−40,788
Live-stock—				
Horses	No.	54,688	50,529	4,159
Cattle	"	186,103	152,820	33,283
Dairy cows (included above) ..	"	69,111	49,110	20,001
Sheep	"	3,746,750	4,402,836	−656,086

NOTE. The minus sign (−) denotes decrease.

* See note on page 426.

The population of the Chatham and Kermadec Islands, which are not included in any provincial district, was 215 persons in 1901, and 290 in 1891.

II.—The Totalisator.

Year.	No. of Totalisator Licenses issued.	Days.	Percentage paid to Treasury.	Total Amount Invested by the Public.
			£	£
1889–90	187	241	..	..
1890–91	219	278	..	..
1891–92	234	300	7,591	506,078
1892–93	240	307	10,800	720,029
1893–94	247	318	10,375	691,673
1894–95	207	268	10,446	696,456
1895–96	170	256	11,156	743,763
1896–97	158	250	11,911	794,096
1897–98	155	268	13,297	886,567
1898–99	144	250	13,695	912,969
1899–1900	154	278	15,983	1,065,580
1900–1901	153	278	17,541	1,168,732

N.B.—The years used for purposes of the table are financial years, not the racing years. This accounts for the number of licenses issued in some of the periods being over the legal limit for one year.

III.—Licenses under the Gaming and Lotteries Act, granted to Religious Denominations.

Return of Licenses granted by the Colonial Secretary under "The Gaming and Lotteries Act, 1881," to Persons connected with Religious Denominations.

Year.	Total Number of Licenses granted.	Church of England.	Presbyterian Church.	Roman Catholic Church.	Jewish Church.	Not stated.
1894–95	46	9	10	23	..	4
1895–96	48	8	1	18	..	21
1896–97	62	30	3	29	..	..
1897–98	70	35	2	32	1	..
1898–99	40	14	..	26	..	..
1899–1900	42	13	..	29	..	..

IV.—Contingents for South Africa.

Seven contingents have been despatched from New Zealand between the 21st October, 1899, and the 6th April, 1901, consisting in all of 2,975 officers, non-commissioned officers, and men, with 2,560 horses; besides which 680 additional horses for remounts were shipped in May and June, 1900. The number forming the different contingents, which were composed of mounted infantry and bushmen, are given in tabular form:—

Return of New Zealand Troops despatched on Active Service in South Africa.

No. of Contingent.	Date of Sailing.	Mounted Infantry.		Bushmen.	
		Officers, n.c.o., and men.	Horses.	Officers, n.c.o., and men.	Horses.
1	21st October, 1899 ..	215	250	..	..
2	20th January, 1900 ..	258	304	..	..
3	17th February, 1900 ..	264	277	..	..
	24th February, 1900 ..	..	96*	..	..
4	24th and 31st March, 1900	466	520	..	..
5	31st March, 1900 ..	..	..	523	533
Reserve	31st March, 1900 ..	71	..	..	..
	19th May, 1900	..	180*	..	..
	16th June, 1900	..	500*	..	..
6	30th January, 1901 ..	..	..	578	580
7	6th April, 1901	..	..	600	..
		1,274	2,127	1,701	1,113

* Remounts for various contingents.

Totals.

Officers, non-commissioned officers, and men.	Horses.
1,274	2,127
523	533
578	580
600	..
2,975	3,240

The names of the vessels by which these troops were despatched, and the number of men conveyed in each vessel, were: s.s. "Waiwera," 21st October, 1899, 215 men; s.s. "Waiwera," 21st January, 1900, 258 men; s.s. "Knight Templar," 17th February, 1900, 264 men; s.s. "Monowai," 24th March, 1900, 245 men; s.s. "Maori," 31st March, 1900, 209 men; s.s. "Waimate," 31st March, 1900, 278 men; s.s. "Gymeric," 31st March, 1900, 328 men; s.s. "Cornwall," 30th January, 1901, 578 officers, non-commissioned officers, and men; s.s. "Gulf of Taranto," 6th April, 1901, 600 officers, non-commissioned officers, and men.

PART III.—ARTICLES ON SPECIAL SUBJECTS.

SECTION I.

THE LAND SYSTEM OF NEW ZEALAND.

[By S. Percy Smith, F.R.G.S.]

The Crown lands of New Zealand are administered under "The Land Act, 1892," together with its amendments and the regulations made thereunder.

The distinguishing features of the present land system are the outcome of ideas which have been gradually coming to maturity for some years past in this colony. These features involve the principle of State ownership of the soil, with a perpetual tenancy in the occupier. This, whatever may be the difference in detail, is the prevailing characteristic of the several systems under which land may now be selected. In New Zealand this tendency to State ownership has taken a more pronounced form than in any other of the Australasian Colonies. In point of fact, most of the Crown lands are now disposed of for 999 years. The rentals are based on the assessed value of the land at the time of disposal, without increase or recurring valuations. Under this system there is a fixity of tenure practically equal to freehold, and which, like freehold, necessarily carries with it the power of sale, sub-lease, mortgage, or disposition by will. At the same time the improvements made in the soil by cultivation, &c., are secured to the tenant should he from any cause be obliged to forfeit or surrender his lease.

The advantages of this system to the selector are manifest. When it is taken into consideration that, with few exceptions, the Crown lands are, in their prairie condition, incapable of profitable use, the advantage to the settler of setting free his capital to develop the capabilities of the soil, rather than having to expend it in the purchase of a freehold, is very apparent. One of the most striking benefits of this system is the advantage it gives to the man who, with little more capital than his strong right arm, is enabled to make a home for himself; which, under the freehold system, he would be unable to accomplish.

The values placed on the Crown lands are, as a rule, low, for the State does not so much seek to raise a revenue directly therefrom as to encourage the occupation of the lands by the people; this occupation secures an indirect increased revenue, besides the other advantages resulting from a numerous rural population.

Again, underlying the whole of the New Zealand land system is a further application of the principle of "the land for the people"—viz., the restriction in area which any man may hold. This subject

has been forced upon the attention of the Legislature by defects in former systems, under which one individual with means at his command could appropriate large areas, to the exclusion of his less wealthy fellow-settler. Under existing conditions, where the price at which land is offered is fixed for ever, and where choice of selection is by ballot, every would-be settler has the same chance, and may hold under the Crown an equal area of land. The quantity that a selector may hold is so fixed as to encourage the class of moderate farmers, for up to the statutory limit the amount he may select is left almost entirely to himself. The Act defines the amount of land any one may hold at 640 acres of first-class, or 2,000 acres of second-class land. These limits apply to lands which are thrown open for optional selection, but in some cases, where the quality of the land is very good and the selectors many, the limit is by regulation made smaller.

In addition to the many advantages offered by the lease-in-perpetuity system, the Land Act provides others, to meet the wants of different classes. The general rule is that land thrown open for optional selection is offered to the public under three different tenures, the choice of which is left to the would-be settler.

The three tenures are:—

(1.) Cash, in which one-fourth of the purchase-money is paid down at once, and the remainder within thirty days. The final title is not given until certain improvements have been made on the land.

(2.) Lease with a purchasing clause, at a 5-per-cent. rental on the value of the land; the lease being for twenty-five years, with the right to purchase at the original upset price at any time after the first ten years and within twenty-five years, or to convert into a lease in perpetuity (3rd tenure).

(3.) Lease in perpetuity, at a rental of 4 per cent. on the capital value.

The present land-laws have been in force since the 1st November, 1892, and, therefore, the returns of the Department of Lands and Survey for the year ending the 31st March, 1901, in respect of lands the tenure of which is optional, will give a fair idea of that tenure most favoured by the public. The figures are:—

1. Cash: 127 selections, 37,862 acres.
2. Occupation with right of purchase: 673 selections, 262,729 acres.
3. Lease in perpetuity: 295 selections, 97,138 acres.

"The Land Act, 1892," provides for a special class of settlement called small-farm associations, which found favour with the public to a very considerable extent during the first three years after the Act of 1892 came into force, but is now superseded to a large extent by the improved-farm settlement system. The small-farm association system provides that, where not less than twelve

individuals have associated themselves together for mutual help, such an association can, with the approval of the Minister of Lands, select a block of land of not more than 11,000 acres, but there must be a selector to each 200 acres in the block. The extreme limit that one person may hold is fixed at 320 acres. Settlements of this class are held on lease in perpetuity, in a similar way to lands under the same tenure when thrown open for optional selection. The conditions of residence and improvement are the same. The system offers many advantages to the settler, so long as the blocks of land are judiciously chosen, having regard to quality of land, access, markets, and the probability of employment being obtained in the neighbourhood. In the eagerness to obtain lands on such easy terms these points have, in the past, not received sufficient attention by some of the associations, and in consequence they are not all successful.

Under "The Land Act, 1885," there was a somewhat similar system, but it allowed of the acquisition of the freehold. This is now being taken advantage of to a considerable extent.

The following figures show the amount of settlement by associations under both Acts on the 31st March, 1901. At that date there were 705 selectors, holding 127,728 acres under various tenures and in different parts of the country. Many of the settlements, which were carefully selected, are doing well. Others, where long and expensive roads have to be made to them, are as yet not very productive, and many selections have been abandoned.

The village-settlement system of New Zealand has excited much inquiry. This system provides: 1st, villages of one acre sections; 2nd, small farms of 100 acres. There has not been any great extension of this system in recent years. On the 31st March last there were 2,011 settlers holding 42,414 acres, and the total number of persons residing in these settlements was 1,411 and 600 non-resident, the amount advanced by Government for houses, clearing, &c., being £15,115, of which £3,340 had been returned. The total value of improvements on the lands at the same date was £159,284. The above figures include the settlement on reserves and endowments.

The improved-farm settlement system was first begun in order to find work for the people. Considerable areas of forest-clad Crown lands were set aside, and small contracts for the clearing, burning, and sowing these with grass have been let. In most cases the farms are selected or balloted for in their primitive state, and the settler is for a time paid for the improvements he makes, or, in other words, the cost of converting forest lands into grass lands is advanced from time to time by the Government. In other cases a piece of forest land is taken in hand, and men are employed at fixed rates in felling, burning, and grassing. When so much grass is laid down as will give a good start, the land is opened for selection in sections of 50 to 200 acres and balloted for among the applicants. The farms are let on lease in perpetuity at a rental sufficient to

cover the cost of clearing, &c., together with a fair rental of the land. Up to the 31st March, 1901, 46 settlements had been allocated, covering an area of 76,069 acres, situate in various parts of the colony. At that date 499 settlers had been allotted sections, who, together with their families, numbered 1,962 persons who were residing on the lands. They had felled and grassed 27,095 acres. The amount paid to the settlers up to the 31st March, 1901, was £67,812 and the total value of improvements on the land (including the Government advances) was £108,835.

The size of holdings averages about 100 acres.

The Land for Settlements Acts.

In the earlier years of the settlement of New Zealand there were opportunities for men of capital and judgment to acquire large estates, and while there were plenty of good Crown lands to select from this was of great advantage to the colony when money was needed for administration and roads and bridges. These large estates employed hired labour, and most of them did little towards cultivating their lands, and consequently progress beyond the pastoral stage ceased in the districts in which they were situated. As the best lands in the course of years passed from the Crown, the country became a series of agricultural communities interspersed with large properties occupied by a manager and a few shepherds, and the people pressed that they and their sons should be allowed to occupy these large estates instead of being compelled to go into inaccessible back country without roads or railways. To meet this the Hon. John McKenzie, then Minister of Lands, introduced into the Legislature in the session of 1892 a Bill intituled "The Land for Settlements Act," which authorised the purchase from private individuals of suitable properties for subdivision into farms. Under the provisions of this Act and the amending Acts, which are now consolidated into the Act of 1900, properties have been acquired, and divided into small farms and leased in perpetuity at a 5-per-cent. rental, on a capital value fixed at a rate sufficient to cover first cost, together with survey, administration, and roads (if required). The usual process of acquisition is as follows: Whenever a property is offered to the Government, if it is so situated as to meet the object of the Act, a report on it is obtained from a Government officer, and, should his report be favourable, the question of purchase is then considered by a Board of Land Purchase Commissioners, composed of the Inspector, who is the permanent Chairman, three other Government officers, whose training and duties qualify them to advise the Government as to whether the purchase is a suitable one, and as to the price which should be given for the property, and a member nominated by the Government from residents in the district where the land to be dealt with is situated. It is only on the advice of this Board that the Government acts. In nearly all cases the properties acquired have been improved to a certain extent by fencing and buildings, and were situated in the neighbourhood of

closely settled districts. The amount which may be expended per annum under the Act is £500,000. The Act also provides for the exchange of high-lying pastoral Crown lands for low-lying agricultural lands suitable for small holdings.

Lands may also be taken compulsorily in cases where the Board cannot agree with the owner as to price, &c., and where the Governor in Council decides to acquire the land for closer settlement. The amount payable to the owner is decided by a Compensation Court, composed of a Judge of the Supreme Court and two Assessors, one appointed by Government, the other by the owner of the property. Two properties have hitherto been acquired compulsorily, and they have been disposed of on satisfactory terms.

The acquisition of lands under the Land for Settlements Acts has proved beneficial in providing homes for a large class of men of moderate capital who shrink from the rough work of breaking in new country or who, having accumulated capital (cash, stock, and implements), prefer open country near civilisation. Sons of farmers begin life near the old home, and help from there is given in many ways. The system also affords to the small-farmer class of the Old Country an opening for building up homes for themselves where their previous experience will be of use, instead of having to learn the methods adapted to a new and wild country.

Preference is given to landless people, and applicants for rural land have to satisfy the Land Board as to their means to stock and cultivate the property applied for and erect suitable buildings thereon. The Board, in fact, has a discretion as to who may become tenants.

Land may also be compulsorily taken for workmen's homes within a borough having a population of at least 15,000 persons, or within a radius of fifteen miles from the border thereof, for the purposes of providing workmen's homes or villages; but the area is restricted to not more than 100 acres every year within any such borough, or within the radius named above from the boundary of the borough.

The owner is left with right to retain an area of not more than 10 acres if in a borough, or 50 acres in any other case.

A workmen's allotment is not to exceed 5 acres, and advances up to £50 are made by Government to successful applicants in aid of the cost of fencing and building dwellinghouses.

Regulations giving full directions to applicants under this Act have been issued from time to time, which should be in the hands of every one before applying for lands under this Act.

An account of the operations under the Land for Settlements Acts will be found in Part II. of this work.

Purchase of Native Lands by Government.

From about the year 1823 (which is the date of the first recorded deed) until the 6th February, 1840, the date of the Treaty of Waitangi, lands in New Zealand were acquired by direct purchase from the Maoris by individual members of the white races. During

the years 1837 to 1839, or about the time it became probable that the sovereignty of the islands would be assumed by the United Kingdom, the greater number of these purchases were made, and they extended to most parts of the country. These purchases are technically known as "the Old Land Claims," and their total number (including pre-emptive claims), as estimated by Commissioner F. Dillon Bell in 1862, was 1,376, covering an area of about 10,322,453 acres, out of which large area grants were recommended for 292,475 acres. These figures have been slightly added to since, but not to any very large extent. The large area shown above was reduced on survey to about 474,000 acres, situated principally to the north of Auckland. The difference in area between the amount granted and the total area surveyed became what are termed "surplus lands of the Crown." It was held that the Native title had been fully extinguished over the whole area surveyed; but, as by statute the claimants could only be granted 2,560 acres each, the balance became vested in the Crown on the assumption of the sovereignty, the Native title having been fully extinguished.

In many cases the titles did not issue to those to whom the land was awarded, as they were compensated by scrip issued by the Government, with the understanding that such scrip was to be exercised in the purchase of Crown lands in the neighbourhood of Auckland, to which place it was desirable—so soon as the capital was founded—to draw a population. The lands thus paid for in scrip became Crown lands, and these, together with the surplus lands, have from time to time been disposed of by the Crown and settled on. The amount of scrip, &c., issued up to 1862 was over £109,000.

On the signing of the Treaty of Waitangi on the 6th February, 1840, the pre-emptive right was ceded to the Government, and consequently private purchase ceased. This remained the law until the passing of "The Native Land Act, 1862," when the Crown relinquished its right of pre-emption, whilst at the same time the purchase of Native lands for the Crown did not abate, but continued side by side with the private purchases up to the passing of "The Native Land Court Act, 1894."

"The Native Land Laws Act, 1899," prohibits the further sale of any Native land except such as was then under negotiation. "The Maori Councils Act, 1900," and the Maori Lands Administration Act of 1900 transfers the powers formerly held by the Native Land Court to Maori Councils partly elected by Maoris and partly nominated by the Governor, and when so directed by the Chief Judge these Councils may proceed to ascertain ownership, to divide, and to appoint successors and trustees. They may also consent to the alienation of land not required for the support of the owners.

From time to time since 1840 various sums were appropriated by Government or by Parliament for the acquisition of a Crown estate. Up to the date of passing of "The Native Land Act, 1862," these

operations were conducted by officers of the Government specially appointed, who, from a knowledge of the Maoris, their customs and disposition, were successful in securing large areas of land for settlement. It must be conceded that their operations as a whole were successful, and that the number of disputed cases arising out of their labours was exceedingly small. The Waitara purchase is, however, here excluded, for there were reasons of general policy affecting that sale which did not prevail in other cases. This purchase was the ostensible cause of the war of 1860 and following years, but the motives which led to it were far deeper than the mere purchase of a few acres—there was a great principle at stake.

The difference effected in the mode of purchase by "The Native Land Act, 1862," was this: Previously, the title of the Maoris who were to receive payment for the land was decided by the Land Purchase officers; but the Act quoted set up a Court, presided over by able Judges, who determined the titles, which were afterwards registered in a special Court. Purchases have since been effected with the registered owners.

It is difficult to obtain figures showing the actual area acquired by the Crown from the Maoris up to 1870, but in round numbers it was 6,000,000 acres in the North Island; whilst the whole of the Middle Island, with the exception of reserves for the original Native owners, was acquired prior to the passing of "The Native Land Act, 1862." Stewart Island was purchased from the Native owners by deed dated 29th June, 1864.

The Native rebellion of 1860–69 brought Native-land purchases, for the time being, practically to a standstill.

The Immigration and Public Works Acts of 1870 and 1873 appropriated £200,000 and £500,000, respectively, for the purchase of lands in the North Island; and these amounts have, up to the 31st of March, 1901, been augmented by further annual appropriations from the public funds and other loan-moneys, covering altogether a total expenditure since 1870 of £1,965,969, with the following results: Area finally acquired in the North Island from Natives, from 1870 to 31st March, 1901, 7,789,659 acres. Area under negotiation in the North Island on 31st March, 1901, 421,230 acres; interests therein finally acquired, 125,000 acres.

DIGEST OF THE LAND-LAWS.

Administration.

The Crown lands are administered, under the authority of "The Land Act, 1892," by the Hon. the Minister of Lands at Wellington. For convenience the colony is divided into ten land districts, each being under the local direction of a Commissioner and a Land Board. The Commissioner's office is known as the principal land office, and in some of the larger districts there are one or more local land offices. It is with these land offices the selector has to transact

all business, from the first consultation of the maps to the final receipt of the Crown title.

Land Districts and Principal Land Offices.

The names of the land districts and of the towns where each principal office is situated are, beginning with the most northerly and taking them geographically, as under:—

Land District.	Town where Principal Land Office is situated.	Land District.	Town where Principal Land Office is situated.
Auckland	Auckland.	Marlborough	Blenheim.
Taranaki	New Plymouth.	Westland	Hokitika.
Hawke's Bay	Napier.	Canterbury	Christchurch.
Wellington	Wellington.	Otago	Dunedin.
Nelson	Nelson.	Southland	Invercargill.

Classification of Lands, &c.

Crown lands are divided into three classes:—

(1.) Town and village lands, the upset prices of which are, respectively, not less than £20 and £3 per acre; such lands are sold by auction:

(2.) Suburban lands, the upset price of which may not be less than £2 an acre; these lands are also sold by auction:

(3.) Rural lands, which may be disposed of at not less than £1 per acre for first-class, and 5s. an acre for second-class lands; such lands may be sold or leased by auction, or sold or leased on application.

No rural section may be larger than 640 acres in extent if first-class land, or 2,000 acres if second-class land, whether offered by auction or application. No person can select more than 640 acres of first-class or 2,000 acres of second-class land, including therein any land which he then holds. Small grazing-runs, first-class, may not exceed 5,000 acres, and second-class 20,000 acres. Pastoral runs are limited to areas which will carry 20,000 sheep or 4,000 cattle. No person can select more than one run.

Mode of acquiring Crown Lands.

Crown lands may be acquired as follows:—

(1.) By auction, after survey, in which case one-fifth of the price is paid down at the time of sale, the balance within thirty days:

(2.) By application, after the lands have been notified as open for selection, in which case the applicant fills up a form (to be obtained at any of the Land Offices) and makes the declaration and undertaking required by the particular system he wishes to select under.

All applications, whether for surveyed or unsurveyed lands, are deemed to be simultaneous if made on the same day, and, if there be more than one applicant for the same land, the right of selection is determined by ballot.

Lands thrown open for application may be either surveyed or unsurveyed, and those not selected the first day remain open.

The Optional System of Selection.

Lands for selection are notified as open for application on and after a stated day, and, *at the option of the applicant*, may be obtained on any of the three following tenures: (*a*) Freehold; (*b*) Occupation with the right of purchase; (*c*) Lease in perpetuity.

(*a.*) *Freehold.*

If the land is surveyed, one-fifth of the price is to be paid down when the application is granted, and the balance within thirty days; or, if the land is not completely surveyed, the survey-fee is deposited when the application is agreed to, and goes towards the purchase of the land; the balance must be paid within thirty days of notice that the survey is completed.

A certificate of occupation will issue to the purchaser on final payment, which will be exchanged for a Crown title so soon as the Board is satisfied that the improvements mentioned on the next page have been completed.

(*b.*) *Occupation with Right of Purchase.*

Lands selected on this tenure are held under a license for twenty-five years. At any time subsequent to the first ten years, and before the expiration of the license, after having resided and made the improvements hereinafter described, the licensee can, on payment of the upset price of the land, acquire the freehold. If the land be not purchased, the license may be exchanged for a lease in perpetuity.

The rent is 5 per cent. on the cash price of the land; a half-year's rent has to be paid at the time the application is approved, if surveyed land, which represents the half-year's rent due in advance on the 1st day of January or July following the selection. If the land is unsurveyed, the cost of survey is to be paid, and is credited to the selector as so much rent paid in advance, counted from the 1st day of January or July following thirty days' notice of the completion of survey.

Residence and improvement of the land are compulsory, as hereinafter described.

(*c.*) *Leases in Perpetuity.*

Lands selected on this tenure are leased for 999 years, subject to the conditions of residence and improvements described below. The rental is 4 per cent. on the cash price of the land, and applications are dealt with in the same way as under the previous tenure (*b*), but there is at no time a right to purchase the freehold.

Two or more persons may make a joint application to hold as tenants in common under either of the two last-named tenures.

Residence and Improvements.

Under the two last-mentioned tenures, the conditions as to residence and improvements are:—

RESIDENCE—

(1.) Must commence on bush or swamp lands within four

years, and in open or partly open land within one year, from the date of selection:

(2.) Must be continuous for six years on bush or swamp land, and for seven years on open or partly open land, on lands occupied with a right of purchase:

(3.) Must be continuous for a term of ten years on lease-in-perpetuity lands.

The Board has power to dispense with residence in certain cases, such as where the selector is residing on adjacent lands, or is a youth or unmarried woman living with parents, and in a few other cases.

RESIDENCE implies the erection of a habitable house to be approved of by the Board.

IMPROVEMENTS which must be made are as follows:—

(1.) Freehold-tenure lands must be improved within seven years to an amount of £1 an acre for first-class land, and 10s. an acre for second-class land.

(2.) Lands held on lease with right of purchase, or on lease in perpetuity, must be improved to an amount equal to 10 per cent. of the value of the land within one year from the date of the license or lease; within two years must be improved to the amount of another 10 per cent.; within six years must be improved to the value of another 10 per cent., making 30 per cent. in all within the six years. In addition to the above, the land must be further improved to an amount of £1 an acre for first-class land, and on second-class land to an amount equal to the net price of the land, but not more than 10s. an acre.

Improvements may consist of reclamation from swamps, clearing of bush, planting with trees or hedges, cultivation of gardens, fencing, draining, making roads, wells, water-tanks, water-races, sheep-dips, embankments or protective works, or in any way improving the character or fertility of the soil; or the erection of any building, &c.; and *cultivation* includes the clearing of land for cropping, or clearing and ploughing for laying down with artificial grasses, &c.

Special-settlement Associations.

Under the existing regulations any number of persons, not less than twelve, may select and apply for a block of land of not less than 1,000 acres or more than 11,000 acres in extent, but the number of members must be such that there shall be one for every 200 acres in the block, and no one can hold more than 320 acres, except in swamp lands, where the area may be 500 acres.

The capital value of lands within a special settlement is fixed after survey by special valuation, but may not be less than 10s. an acre; the rental is not less than 4 per cent. on the capital value, and the tenure is a lease in perpetuity.

Residence, occupation, and improvements are generally the same as already described, and applications have to be made in manner prescribed by regulations.

Applicants should apply to a Commissioner for a copy of the regulations, as they are liable to change at any time.

Suitable land for small settlement of this kind is now scarce.

Improved-farm Settlements.

Special regulations are in force for this class of settlement, which should be applied for, but briefly the terms are as follow: Applicants are selected by the Commissioner of Crown Lands, preference being given to married men. The areas of the farms may vary from 10 acres to 200 acres, according to locality; no settler can select more than one farm. Contracts are made with the settler to fell the forest, burn it, and sow with grass-seed up to 100 acres, the cost being paid by the Government, and £10 may be advanced to help to build a house. The rates allowed for felling are those current in the district. The land is then leased for 999 years at a rental of 4 per cent. on the unimproved capital value, *plus* the actual cost of the felling and grassing. As a rule, the settlers can get employment on the road-works in the neighbourhood, but Government does not guarantee this.

Residence for the first ten years is compulsory, and improvements must be made in terms of Part III. of "The Land Act, 1892." (See *ante*.)

Village Settlements.

Village settlements are disposed of under regulations made from time to time by the Governor, but the main features are as follow:—

Such settlements may be divided into:—

(1.) Village allotments not exceeding one acre each, which are disposed of either by auction among the applicants or by application, as already described, with option of tenure, the cash price being not less than £3 per allotment:

(2.) Homestead allotments not exceeding 100 acres each, which are leased in perpetuity at a 4-per-cent. rental on a capital value of not less than 10s. per acre.

Residence, improvements, and applications are the same as already described. The leases are exempt from liability to be seized or sold for debt or bankruptcy.

The Colonial Treasurer is empowered in certain cases to advance small sums for the purpose of enabling selectors to profitably occupy their allotments.

Small Grazing-runs.

Small grazing-runs are divided into two classes: First-class, not exceeding 5,000 acres; second-class, not exceeding 20,000 acres in area. The rental in both cases is not less than $2\frac{1}{2}$ per cent. on the capital value per acre, but such capital value cannot

be less than 5s. per acre. Small grazing-runs are leased for terms of twenty-one years, with right of renewal for other twenty-one years, at a rent of 2½ per cent. on the then value of the land. The runs are declared open for selection, and applications and declarations on the forms provided have to be filled in and left at the Land Office, together with the deposit of one half-year's rent, which represents that due on the 1st day of March or September following the selection.

No holder of a pastoral run, and no holder of freehold or leasehold land of any kind whatever, over 1,000 acres in area, exclusive of the small grazing-run applied for, may be a selector under this system; and only one small grazing-run can be held by any one person.

The lease entitles the holder to the grazing rights, and to the cultivation of any part of the run, and to the reservation of 150 acres round his homestead through which no road may be taken; but the runs are subject to the mining laws.

Residence is compulsory, if bush or swamp land, within three years; if open, within one year; and must be continuous to the end of the term, but may in a few cases be relaxed. Improvements necessary are as follow: Within the first year, to the amount of one year's rent; within the second year, to another year's rent; and, within six years, to the value of two other years' rent: making in all a sum equal to four years' rental, which must be expended within six years. In addition to these improvements, bush-covered first-class runs must be improved to an amount of 10s. an acre, and second-class bush-clad runs to an amount of 5s. an acre.

These runs may be divided, after three years' compliance with the conditions, amongst the members of the selector's family.

Pastoral Runs.

Pastoral country is let by auction for varying terms not exceeding twenty-one years; and, excepting in extraordinary circumstances, runs must not be of a greater extent than will carry 20,000 sheep or 4,000 head of cattle. Runs are classified from time to time by special Commissioners into: (1) Pastoral lands, which are suitable only for depasturing more than 5,000 sheep; (2) pastoral-agricultural lands, suitable for subdivision into areas of under 5,000 acres, which may be either let as pastoral runs, generally for short terms, or cut up for settlement in some other form. Leases of pastoral lands may not be resumed; leases of pastoral-agricultural lands may be resumed at any time after twelve months' notice, without compensation.

No one can hold more than one run; but, in case of any one holding a run of a carrying-capacity less than 10,000 sheep, he may take up additional country up to that limit.

Runs are offered at auction from time to time, and half a year's rent has to be paid down at the time of sale, being the amount due in advance on the 1st day of March or September following the

sale, and the purchaser has to make the declaration required by the Act. All leases begin on the 1st day of March, and they entitle the holder to the grazing rights, but not to the soil, timber, or minerals; and the lease terminates over any part of the run which may be leased for some other purpose, purchased, or reserved. The tenant has to prevent the burning of timber or bush; in open country to prevent the growth of gorse, broom, or sweetbriar; and to destroy the rabbits on his run. With the consent of the Land Board, the interest in a run may be transferred or mortgaged, but power of sale under a mortgage must be exercised within two years.

In case it is determined again to lease any run on expiry of the lease, the new lease must be offered by auction twelve months before the end of the term, and if, on leasing, it shall be purchased by some one other than the previous lessee, valuation for improvements, to be made by an appraiser, shall be paid by the incoming tenant, but to a value not greater than three times the annual rent—excepting in the case of a rabbit-proof fence, which is to be valued separately. If the run is not again leased, the value of rabbit-proof fencing is paid by the Crown, but the tenant has no claim against the Crown beyond the value of the rabbit-proof fence; he may, however, within three months of sale, remove fences, buildings, &c. Runs may also be divided with the approval of the Board.

Survey Charges on Unsurveyed Lands.

The following is the scale of charges for surveys of unsurveyed lands:—

Not exceeding 30 acres, £6.

Exceeding 30 and up to 50 acres, 3s. 6d. per acre, but not less than £6.

Exceeding 50 and up to 100 acres, 3s. per acre, but not less than £8 15s.

Exceeding 100 and up to 200 acres, 2s. 6d. per acre, but not less than £15.

Exceeding 200 and up to 300 acres, 2s. per acre, but not less than £25.

Exceeding 300 and up to 500 acres, 1s. 8d. per acre, but not less than £30.

Exceeding 500 and up to 1,000 acres, 1s. 4d. per acre, but not less than £41 10s.

Exceeding 1,000 and up to 2,000 acres, 1s. per acre, but not less than £66 10s.

For the survey of any area of rural land, being open land, the scale of charges shall be two-thirds the foregoing rates.

The Chief Surveyor may vary the above charges by substituting a rate per mile or per day for such work as may not come under the foregoing scale.

ADVANCES TO SETTLERS.

THE Government Advances to Settlers Act was a Government policy measure in the legislation of 1894. It was designed to afford relief to a numerous class of colonists who were struggling under the burden of high rates of interest and heavy legal expenses of mortgages. These were established when prices of agricultural produce were high and profits large; and, so long as business continued to be prosperous, they attracted but little, if any, attention. For several years preceding 1894 commerce and agriculture had suffered from world-wide depression; settlers were becoming embarrassed in their circumstances; and the high rates of interest still charged were felt to be a burden on the industry of the people not easily borne, and a hindrance to the settlement and development of the farming lands of the colony. Under these circumstances the Government brought in the Government Advances to Settlers Act. It was passed towards the close of the session of 1894, and immediately came into operation, with results which have proved beneficial to the farming community. A general decline in the rates of interest at once set in, and it is not too much to claim that the Act has been instrumental in lowering these to a considerable extent on several millions of money invested on mortgage of the farming lands of the colony. This result, while it may have diminished the incomes of a few persons resident within the colony, has benefited thousands of deserving settlers and led to large areas of land being brought under cultivation that, but for the Advances to Settlers Act, would still be in their natural state.

The Act authorised the raising of three million pounds sterling within two years, in sums of a million and a half per annum, at a rate of interest not higher than 4 per cent. In May, 1895, tenders were invited in London for £1,500,000 of 3-per-cent. inscribed stock of the Government of New Zealand, and applications were received for £5,960,400 at prices ranging from £100 to £90. The million and a half was placed at an average price of £94 8s. 9d.

An amending Act, passed in 1895, extended the time for raising the residue of the three millions to three years from the coming into operation of the amending Act. In 1898 this term was extended for a further period of three years. £740,000 of the second half of the loan has been raised on satisfactory terms.

To carry out the objects of the Act, an office was established called the "Government Advances to Settlers Office"; at the same time a General Board was constituted to co-operate with and assist the Superintendent, the title by which the chief administrative officer is known.

The business of the office is the advancing of money in New Zealand on first mortgage of lands and improvements held under

the following classes of tenure, free from all encumbrances, liens, and interests other than leasehold interests, that is to say :—

(1.) Freehold land held in fee-simple under "The Land Transfer Act, 1885," or freehold land held in fee-simple the title to which is registered under "The Deeds Registration Act, 1868."

(2.) Crown land held on perpetual lease under "The Land Act, 1885."

(3.) Crown land held under Parts III. and IV. of "The Land Act, 1892."

(4.) Crown land held on lease as a small grazing-run under "The Land Act, 1885," or under "The Land Act, 1892."

(5.) Crown land held on agricultural lease under "The Mining Act, 1891."

(6.) Crown land held on lease (not being for mining purposes) under "The Westland and Nelson Coalfields Administration Act, 1877."

(7.) Native land held on lease under "The West Coast Settlement Reserves Act, 1881," or under the Act of 1892.

(8.) Land held on lease under "The Westland and Nelson Native Reserves Act, 1887."

(9.) Land held under "The Thermal-Springs Districts Act, 1881."

(10.) Educational and other reserves which are subject to the provisions of "The Land Act 1877 Amendment Act, 1882," by virtue of Proclamation made under section 50 thereof, or "The Land Act, 1885," by virtue of Proclamation made under section 237 thereof, or "The Land Act, 1892," by virtue of Proclamation made under section 243 thereof, and are held on perpetual lease or lease in perpetuity, or on deferred-payment or small grazing-run systems.

(11.) Crown land held by license on the deferred-payment system under Part III. of "The Land Act, 1885."

(12.) Land held under lease from a leasing authority, as defined by "The Public Bodies' Powers Act, 1887," and providing for the payment by the incoming tenant of valuation for improvements made upon the land, whether by the lessee named in such lease or any former lessee, as tenant.

With regard to classes 10 and 12, a lease is not eligible if it provides for absolute forfeiture (without compensation) for breach of conditions, or if on the determination of the lease compensation is to be allowed for certain improvements only.

Mortgages are granted either on the instalment or the fixed-loan system (fully described hereafter); and the margins of security required by the Act are as follow :—

(1.) On freeholds (other than urban or suburban) three-fifths of the value may be advanced either on the instalment or fixed-loan system: Provided that in the case of first-class agricultural freeholds instalment loans may be advanced up to two-thirds of the value.

(2.) On leaseholds (other than urban or suburban) one-half of the value of the lessee's interest in the lease may be advanced on the instalment system. No loans are granted on leaseholds on the fixed-loan system.

(3.) On urban and suburban freeholds, loans are granted on the instalment system only, and the amounts of loan are limited as follow:—

(*a.*) On urban freehold on which buildings exist, three-fifths of the value of the land, *plus* one-half the value of the buildings, may be advanced;

(*b.*) On suburban freehold on which buildings exist, one-half the value of the land, *plus* one-half the value of the buildings, may be advanced:

(*c.*) On urban or suburban freehold on which no buildings exist, one-half the value of the land may be advanced, but on such security no loan shall be granted except for the erection of buildings on the land: the loan to be advanced by instalments at the discretion of the Board, as the erection of the buildings proceeds.

"Urban land" means land which is situate in a borough having a population of at least two thousand inhabitants and is not used for farming, dairying, or market-gardening purposes.

"Suburban land" means land which is situate in a borough having a population of less than two thousand inhabitants, or in any town, or in the vicinity of any town or borough, and is not used for farming, dairying, or market-gardening purposes.

Lands situated within towns which are used for farming, dairying, or market-gardening are treated in accordance with paragraph (3), subsections (*a*) and (*b*), hereof.

The right of determining what land may be considered "urban" or "suburban," or "first-class agricultural," is imposed by the Act on the General Lending Board.

The security which the applicant offers for the loan must consist of one or more holdings of the several classes of tenure above mentioned, and must, of course, be of the necessary value; and, if the security is leasehold, all the covenants and conditions of the lease, including the payment of rent, must have been regularly complied with.

Any person desiring an advance is required to make a written application on the prescribed form, a copy of which can be obtained from any Postmaster in the colony. The Postmaster also supplies an envelope in which the application may be forwarded free of post-

age, and affords to the applicant any explanation which may be required respecting the filling-in of the application.

In the case of an application for an advance on the security of an interest in land held under a lease or license issued from the Lands Department (and belonging to one or more of the classes of tenure numbered 2, 3, 4, 5, 6, 9, 10, 11), a notice of the application must be forwarded to the Commissioner of Crown Lands for the district in which the land is situated, on a form which, with an envelope for forwarding it free of postage, may be obtained from any Postmaster in the colony.

No loan of less than £25 or more than £3,000 can be granted, and in the case of "urban" or "suburban" lands the maximum loan is fixed at £2,000.

All applications must be accompanied by a valuation-fee according to the following scale :—

	£	s.	d.
On an application for a loan not exceeding £100	0	10	6
Exceeding £100 but not exceeding £250 ...	1	1	0
Exceeding £250 but not exceeding £500 ...	1	11	6
Exceeding £500 but not exceeding £3,000 ...	2	2	0

If the applicant has already obtained any advance under the Act and is desirous of obtaining a further advance, either on the same security or on a separate security, the amount of the application, added to the amount of the advances already obtained, must not exceed the limit mentioned above—£3,000 for farming and £2,000 for urban or suburban lands.

Mortgages granted on the fixed-loan system may be for any period not exceeding ten years, and the principal is repayable at the end of the term. They may also be repaid in whole or in part on any half-yearly due date during the term, as explained hereafter. Interest at the rate of 5 per cent. is payable half-yearly, reducible to 4½ per cent. provided payment is made not later than fourteen days after due date and there are no arrears.

Mortgages granted on the instalment system are repayable by seventy-three half-yearly payments of principal and interest combined. They may also be repaid in whole or in part at any time. Interest is charged at the rate of 5 per cent., reducible to 4½ per cent. provided payment is made not later than fourteen days after due date and there are no arrears.

Every half-yearly instalment, except the last, is at the rate of £3 (less the rebate of interest in case of prompt payment) for every £100 of the loan. The following table shows, taking a loan of £100 as an instance, how much of each instalment is applied to repaying the principal, and how much is in payment of interest. It shows also the balance of principal remaining due after payment of the respective instalments until the loan is entirely repaid in thirty-six years and a half :—

TABLE OF PRESCRIBED HALF-YEARLY INSTALMENTS FOR EVERY ONE HUNDRED POUNDS OF THE LOAN.

Half-year.	Prescribed Half-yearly Instalment.	Apportioned thus:		Balance of Principal owing.
		On Account of Interest at 5 per Cent.	On Account of Principal.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1st	3 0 0	2 10 0	0 10 0	99 10 0
2nd	3 0 0	2 9 9	0 10 3	98 19 9
3rd	3 0 0	2 9 6	0 10 6	98 9 3
4th	3 0 0	2 9 3	0 10 9	97 18 6
5th	3 0 0	2 9 0	0 11 0	97 7 6
6th	3 0 0	2 8 8	0 11 4	96 16 2
7th	3 0 0	2 8 5	0 11 7	96 4 7
8th	3 0 0	2 8 1	0 11 11	95 12 8
9th	3 0 0	2 7 10	0 12 2	95 0 6
10th	3 0 0	2 7 6	0 12 6	94 8 0
11th	3 0 0	2 7 2	0 12 10	93 15 2
12th	3 0 0	2 6 11	0 13 1	93 2 1
13th	3 0 0	2 6 7	0 13 5	92 8 8
14th	3 0 0	2 6 3	0 13 9	91 14 11
15th	3 0 0	2 5 10	0 14 2	91 0 9
16th	3 0 0	2 5 6	0 14 6	90 6 3
17th	3 0 0	2 5 2	0 14 10	89 11 5
18th	3 0 0	2 4 9	0 15 3	88 16 2
19th	3 0 0	2 4 5	0 15 7	88 0 7
20th	3 0 0	2 4 0	0 16 0	87 4 7
21st	3 0 0	2 3 7	0 16 5	86 8 2
22nd	3 0 0	2 3 2	0 16 10	85 11 4
23rd	3 0 0	2 2 9	0 17 3	84 14 1
24th	3 0 0	2 2 4	0 17 8	83 16 5
25th	3 0 0	2 1 11	0 18 1	82 18 4
26th	3 0 0	2 1 6	0 18 6	81 19 10
27th	3 0 0	2 1 0	0 19 0	81 0 10
28th	3 0 0	2 0 6	0 19 6	80 1 4
29th	3 0 0	2 0 0	1 0 0	79 1 4
30th	3 0 0	1 19 6	1 0 6	78 0 10
31st	3 0 0	1 19 0	1 1 0	76 19 10
32nd	3 0 0	1 18 6	1 1 6	75 18 4
33rd	3 0 0	1 18 0	1 2 0	74 16 4
34th	3 0 0	1 17 5	1 2 7	73 13 9
35th	3 0 0	1 16 10	1 3 2	72 10 7
36th	3 0 0	1 16 3	1 3 9	71 6 10
37th	3 0 0	1 15 8	1 4 4	70 2 6
38th	3 0 0	1 15 1	1 4 11	68 17 7
39th	3 0 0	1 14 5	1 5 7	67 12 0
40th	3 0 0	1 13 10	1 6 2	66 5 10
41st	3 0 0	1 13 2	1 6 10	64 19 0
42nd	3 0 0	1 12 6	1 7 6	63 11 6
43rd	3 0 0	1 11 9	1 8 3	62 3 3
44th	3 0 0	1 11 1	1 8 11	60 14 4
45th	3 0 0	1 10 4	1 9 8	59 4 8
46th	3 0 0	1 9 7	1 10 5	57 14 3
47th	3 0 0	1 8 10	1 11 2	56 3 1
48th	3 0 0	1 8 1	1 11 11	54 11 2
49th	3 0 0	1 7 3	1 12 9	52 18 5
50th	3 0 0	1 6 6	1 13 6	51 4 11

Visit of H.R.H. the Duke of Cornwall and York: Government Arch, Wellington.

TABLE OF PRESCRIBED HALF-YEARLY INSTALMENTS FOR EVERY ONE HUNDRED POUNDS OF THE LOAN—*continued.*

Half-year.	Prescribed Half-yearly Instalment.	Apportioned thus:		Balance of Principal owing.
		On Account of Interest at 5 per Cent.	On Account of Principal.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
51st	3 0 0	1 5 8	1 14 4	49 10 7
52nd	3 0 0	1 4 9	1 15 3	47 15 4
53rd	3 0 0	1 3 11	1 16 1	45 19 3
54th	3 0 0	1 3 0	1 17 0	44 2 3
55th	3 0 0	1 2 1	1 17 11	42 4 4
56th	3 0 0	1 1 1	1 18 11	40 5 5
57th	3 0 0	1 0 2	1 19 10	38 5 7
58th	3 0 0	0 19 2	2 0 10	36 4 9
59th	3 0 0	0 18 1	2 1 11	34 2 10
60th	3 0 0	0 17 1	2 2 11	31 19 11
61st	3 0 0	0 16 0	2 4 0	29 15 11
62nd	3 0 0	0 14 11	2 5 1	27 10 10
63rd	3 0 0	0 13 9	2 6 3	25 4 7
64th	3 0 0	0 12 7	2 7 5	22 17 2
65th	3 0 0	0 11 5	2 8 7	20 8 7
66th	3 0 0	0 10 3	2 9 9	17 18 10
67th	3 0 0	0 9 0	2 11 0	15 7 10
68th	3 0 0	0 7 8	2 12 4	12 15 6
69th	3 0 0	0 6 5	2 13 7	10 1 11
70th	3 0 0	0 5 1	2 14 11	7 7 0
71st	3 0 0	0 3 8	2 16 4	4 10 8
72nd	3 0 0	0 2 4	2 17 8	1 13 0
73rd	1 13 10	0 0 10	1 13 0	..

With reference to the above table, it has to be borne in mind that the amount of each instalment (£3) is reduced by one-tenth of the amount set down for interest if payment is made within the prescribed time. Thus, a mortgagor paying promptly his first instalment on a loan of £100 would be charged not £3, but £2 15s., the interest being reduced by one-tenth.

The mortgagor under the instalment system may pay to the Superintendent at any time, and under the fixed-loan system on any half-yearly due date, the whole balance of principal owing, with interest to date of payment, and obtain a discharge of the mortgage on payment of the fee prescribed for such discharge.

The mortgagor may also from time to time pay to the Superintendent, in addition to the half-yearly payments, sums of £5 or a multiple of £5, and in the case of fixed loans such deposits are applied in reduction of the advance, and interest is charged on the balance only; or, if the mortgagor so directs, such deposits are held on his behalf and applied in payment of the half-yearly instalments of interest as they fall due.

In the case of an instalment loan, money paid in advance by

a mortgagor is applied in one of the following methods, according as he directs:—

(*a*.) It may be held on his behalf and applied in payment of the half-yearly instalments (consisting partly of interest and partly of principal) as they fall due, until the deposit is exhausted.

(*b*.) It may be applied at once in payment of as many future half-yearly instalments of principal (but not of interest) as it will cover, and, as far as such instalments are concerned, the corresponding interest will not be charged. On the next half-yearly date, however, the mortgagor will be required to continue his payments as before, the advance payment having the effect of reducing the period (thirty-six years and a half) during which he would have to pay such instalments. For instance, a mortgagor has a loan of £100: On the due date of his eighth half-yearly instalment he pays, in addition to the amount due, a sum of £5. This is applied in payment of his ninth, tenth, eleventh, twelfth, thirteenth, fourteenth, and fifteenth instalments of principal—12s. 2d., 12s. 6d., 12s. 10d., 13s. 1d., 13s. 5d., 13s. 9d., 14s. 2d. (see table), making a total of £4 11s. 11d.—and the corresponding interest, £2 7s. 10d., £2 7s. 6d., £2 7s. 2d., £2 6s. 11d., £2 6s. 7d., £2 6s. 3d., £2 5s. 10d., is not charged. A balance of 8s. 1d. remains in his favour. Then on the next due date he has to make the half-yearly payment as usual (less 8s. 1d.), but, instead of being the ninth, it counts as the sixteenth instalment, and by this means the whole loan is repaid three years and a half earlier (seven half-yearly payments) than it otherwise would.

(*c*). It may be applied as explained in the next paragraph.

On the due date of any instalment, after at least one-tenth of the loan has been repaid, by means of the half-yearly instalments or of moneys repaid in advance, or both, the mortgagor (provided he is not in arrear with any instalment or other payment due under the mortgage) may, with the consent of the Superintendent, readjust the loan by treating the balance of principal then unpaid as a fresh loan duly granted on that date for a fresh term. But no readjustment is allowed unless the balance of unpaid principal amounts to at least £100. Under this arrangement the mortgagor is relieved of paying interest calculated on the original amount of the loan. He only pays interest on the balance of principal not repaid.

Advance payments in reduction of the mortgage, unless made on the due date of a half-yearly payment, take effect only from the next due date.

The law-costs payable for preparing and completing the mortgages under the Act are as follow:—

Mortgages under "The Land Transfer Act, 1885."

Law-costs of perusing title, preparing and registering mortgage (to be deducted from the advance),—

	£	s.	d.
If advance be not exceeding £500	0	10	6
Exceeding £500, but not exceeding £1,000	1	1	0
Exceeding £1,000, but not exceeding £3,000 ..	1	11	6

With cash disbursements, which are the same in every case, namely,—

Mortgage-forms	2s.	
Search-fee	2s.	With an additional 2s. for every certificate of title after the first.
Registration	10s.	

Mortgages under "The Deeds Registration Act, 1868."

Law-costs of perusing title, preparing and registering mortgage, including disbursements (to be deducted from the advance),—

	£	s.	d.
If advance be not exceeding £500	2	10	0
For every additional £500	0	15	0
Fee chargeable by solicitor not residing in registration centre for employing agent to register mortgage	0	5	0
Solicitor's charge for obtaining Land Board's consent to mortgage of leasehold land	0	5	0
Fee for execution of consent by the Superintendent to any document	0	10	0
Fee for production of title-deeds held by the Superintendent	0	10	0
Fee for partial or total discharge of mortgage ..	0	5	0

Solicitors are entitled to charge moderately for any services mortgagors may require over and above those for which the above scale fixes the costs—such services, for example, as clearing encumbered titles, obtaining and registering titles, &c.

Valuation reports on the securities offered are made on behalf of the Department by expert land-valuers; and these reports, together with the corresponding valuations appearing in the district valuation-rolls, prepared in accordance with the provisions of "The Government Valuation of Land Act, 1896," and reports from the Commissioners of Crown Lands in the case of Crown leaseholds, are considered by the General Board. Board meetings are held weekly, or as occasion requires, and the Superintendent is bound by the resolutions of the Board. A resolution is taken with regard to every application placed before the General Board, so that on the Board rests the responsibility of granting loans or of refusing to grant them.

Some applicants offer securities which are obviously not eligible; and in that event the valuation-fees paid are returned, the securities are not reported on, and the applications do not go before the Board.

By arrangements made with the Post Office, mortgagors are enabled to pay their instalments and interest to the credit of the Superintendent at any money-order office throughout the colony, and free of all costs for remitting the money to Wellington. This is an arrangement at once convenient and economical for the large number of persons scattered all over the colony who have financial dealings with the Advances to Settlers Office. Loans may also be repaid in full through the Post Office.

The officials of the Government Advances to Settlers Office are bound by declaration to observe secrecy respecting applications for advances, and are forbidden to give any information respecting the business of the Department except to officers appointed to assist in carrying out the provisions of the Act.

The Act provides penalties for persons employed in the business of the Advances to Settlers Office taking any fee or reward from an applicant for a loan under the Act; for persons acting as valuers of land in which they have a pecuniary interest; and for persons who may attempt to bribe any one employed under the Act. It should be understood that no commission, charge, or procuration fee is payable in connection with an application for a loan.

The first meeting of the General Board for the purpose of considering applications for loans was held on 23rd February, 1895; and up to the 31st March, 1901, the Board had authorised 9,931 advances, amounting to £3,244,900. The total amount applied for in the 9,931 applications granted in full and partially was £3,691,005. 1,230 applicants declined the partial grants offered to them, amounting to £565,380; so that the net advances authorised at 31st March, 1901, numbered 8,701, and amounted to £2,679,520. The security for the net authorised advances was valued at £5,859,039. The number of applications received up to 31st March, 1901, was 12,999, for an aggregate amount of £4,540,828.

THE LAND-TAX AND INCOME-TAX.

By an Act of Parliament passed in 1891, entitled "The Land and Income Assessment Act, 1891," a system of taxation on the unimproved value of land and the capital value of mortgages of land, in conjunction with a tax on incomes in excess of £300 a year, was instituted. Various amending Acts were passed from time to time, and in 1900 the law was consolidated in one measure—"The Land and Income Assessment Act, 1900."

Nine years' taxation on this basis has now been collected to date, and it may be safely claimed that the system has, from a financial point of view, exceeded the anticipations of its authors, and that the revenue is collected practically without friction.

The Land-tax.

The yield of land-tax for 1900–1901 was, in round figures, £294,000, of which about £222,000 represents ordinary tax; the balance, £72,000, being graduated tax, and the special tax on absentee landowners.

For the purposes of the "ordinary" land-tax, owners are allowed under the Act to deduct from the total unimproved value of their land the amount of any registered mortgage thereon, and the mortgagees are required to make a return of all their mortgages. In the case of uncompleted sales, where the title has not been transferred

the amount of unpaid purchase-money is treated as a mortgage—that is, it may be deducted by the purchaser and must be included in the return made by the vendor.

An owner of land the unimproved value of which, together with mortgages owing to him, does not exceed £1,500 (after deducting mortgages owing by him) is allowed an exemption of £500, but where such value exceeds £1,500 the exemption diminishes by £1 for every £2 that such value increases, so that no exemption is allowable when £2,500 is reached.

The Act contains a provision that in cases where the income from any land or mortgages, *plus* income from all other sources, is less than £200 per annum, and the owner is incapacitated by age or infirmity from supplementing such income, a further exemption may be allowed by the Commissioner upon his being satisfied that the payment of the tax would entail hardship on such owner. This discretionary power has been exercised in a considerable number of instances, especially in the case of widows and orphans with small means, and much hardship prevented.

All mortgages are assessed at their full nominal value, except where it is satisfactorily shown that owing to depreciation of the security or other cause such value has been diminished. In the case of mixed mortgages—that is, mortgages which are secured on both real and personal property—the amount of the mortgage chargeable with land-tax is taken to be the assessed value of the land included in the security, the interest derived from the balance of mortgage being liable to income-tax.

It will be readily seen that the deductions and exemptions which have been referred to materially reduce the number of taxpayers as compared with the number of land-owners, the latter being upwards of 110,000, whilst the former only number about 16,000.

If the unimproved value of land in any assessment amounts to £5,000 or over, graduated tax is payable thereon according to the scale given on another page. Mortgages, however, are not chargeable with the graduated tax; but, on the other hand, no deduction is allowed in an assessment for graduated tax in respect of any mortgage owing on the land.

Twenty per cent. additional on the amount of the graduated tax is levied where the owners have been resident out of the colony for a period of not less than one year next preceding the date of the passing of the annual taxing Act.

Native lands which are occupied by Europeans are subject to the ordinary tax, it being considered that as such lands have benefited equally with the lands of Europeans by the expenditure of public money, they should bear some proportion of the taxation. But, recognising that in some instances, where the interests of the Native owners are small, the collection of the tax might possibly entail some hardship, the Legislature decided that only half the usual rate should be collected on such lands. Graduated tax is not chargeable on Native land

The Income-tax.

Both the number of income-tax payers and the amount of tax received may appear at first sight smaller than might be expected from the population of New Zealand, but it should be remembered that incomes from land and mortgages are exempt, the unimproved value of the former and the capital value of the latter being chargeable with land-tax in the manner hereinbefore explained. The statutory exemption of £300, *plus* life-insurance premiums up to £50, renders a very large number of employés and small traders exempt from the tax. Companies pay the tax on profits, and dividends are not returnable by their shareholders. These circumstances will account for the smallness of the number (5,600) subject to income-tax and, to a certain extent, the comparatively inconsiderable contribution to the revenue.

Objections to income assessments are heard in private before the Stipendiary Magistrate.

It would be impossible to indicate the number and variety of questions which arise daily in connection with income assessments, much less to give any intelligent account of how they are dealt with. The department has endeavoured to lay down certain definite rules for its guidance in the greater number of cases, and a memorandum embodying these has been circulated among all who have been called upon to make returns. It is, however, much too lengthy to introduce here.

Amongst the questions to which special attention has been given is that of the depreciation of plant and machinery, and the amount to be allowed as a deduction under this heading. The Amendment Act of 1894 admitted, amongst deductions, an allowance for depreciation of plant and machinery over and above what might be claimed as repairs and renewals, and this allowance is maintained in the Act of 1900. The allowance is, by law, fixed at "what might be considered just by the Commissioner," but the Chief Inspector of Machinery is, in this matter, the expert adviser of the department, and he fixes the rates to be allowed on the different classes of machinery. There were naturally some differences of opinion between owners of machinery and the department, but only in the case of steam-vessels has the Inspector found it necessary to alter the scale first laid down. The rule formulated for the Inspector's guidance was as follows:—

An allowance to be made of such an amount (over and above what is expended in renewals and repairs) as will equal the annual loss of profit-earning power.

This is not intended to provide for the loss of capital invested, but simply represents the annual loss through wear and tear (as affecting income-earning capacity), other than that which can be made good by renewals of parts and repairs.

Obsolete machinery is also allowed for when the machinery has been actually discarded; and here the amount to be allowed must bear the same proportion to the whole loss as the time the tax has been in operation bears to the life of the machine. An engine discarded in the third year of the tax—the life of the engine being, say, twenty years—would be allowed for to three-twentieths of the loss incurred, less the annual amounts that had been allowed by the department for depreciation for those three years. Machinery superseded by something better, but kept in reserve in case of a breakdown, would not be allowed for.

In the consolidating Act of 1900, before referred to, a further allowance has been made to taxpayers who occupy their own freehold or leasehold premises. Such taxpayers are now entitled to deduct a sum at the rate of 5 per cent. on the capital value of their interest in the land or improvements thereon. This concession is intended to remove an anomaly which previously existed as between a taxpayer in business who occupied premises for which he paid rent and one who occupied his own freehold, or premises erected on leasehold ground. In the first case rent was deducted, and in the hands of the landlord was not taxable, being income derived from land; in the second case the allowance was limited under the then existing law to 5 per cent. on the amount on which land-tax was paid. This might be nothing, and in the case of premises on leasehold land no allowance could then be made. As an equivalent of the rent paid by a tenant, a freeholder is now allowed a deduction of 5 per cent. on the capital value of his business premises; while a leaseholder, who was previously entitled to deduct his ground-rent only, is now allowed a further deduction of 5 per cent. on the capital value of any leasehold interest he may own in his business premises. Mortgage interest, however, is not now deductible. The deduction of 5 per cent. on the capital value of the taxpayer's interest in his business premises precludes any further deduction. The effect of the provision is to exclude land, with its profits and liabilities, from the income-tax system.

It should be mentioned here that the statutory exemption of £300 is not allowed to absentees, whether firms or individuals, nor to companies.

Regulations have been issued for levying income-tax on the profits earned by shipowners whose headquarters are beyond the colony. The plan adopted is to require a return of the outward freight and passenger lists, and to levy tax at the rate of one shilling in the pound upon 5 per cent. of the total returned.

Yield of Tax.

For 1895–96 the land-tax yielded £271,000, and the income-tax £94,000; for 1896–97 the yield of the land-tax was £272,000, and the income-tax £105,000; for 1897–98 the land-tax yielded £269,000, and the income-tax £115,000; for 1898–99 the land-tax

yielded £298,000, and the income-tax £115,500; for 1899–1900 the land-tax yielded £294,000, and the income-tax £129,000; and for 1900–1901 the land-tax yielded £294,000 and the income-tax £173,000.

Rates of Tax.

The rates of tax at present are as follow: The ordinary land-tax is 1d. in the pound; the graduated tax commences at £5,000, at ⅛d. in the pound on the unimproved value, and rises to 2d. where the unimproved value of an owner's land is £210,000, or exceeds that sum. The ordinary tax on Native land occupied by Europeans is ½d. in the pound. For taxpayers other than companies the rate of income-tax is 6d. in the pound on the first taxable £1,000—that is, after deducting the £300 exemption—and 1s. in the pound on any excess over £1,000. A person having an annual income of £1,900 would be thus taxed: £300 would be exempted; £1,000 would pay 6d. in the pound; and the remaining £600, 1s. in the pound: making a total of £55 a year. The tax on an income of £400 would be at 6d. on £100, equal to £2 10s. Income-tax is payable by companies, at the uniform rate of 1s. in the pound.

The schedule of rates of graduated land-tax is as follows:—

Where the value is	£5,000 and is less than £10,000,	one-eighth of a penny in the pound sterling.
Where the value is	£10,000 and is less than £15,000,	two-eighths of a penny in the pound sterling.
Where the value is	£15,000 and is less than £20,000,	three-eighths of a penny in the pound sterling.
Where the value is	£20,000 and is less than £25,000,	four-eighths of a penny in the pound sterling.
Where the value is	£25,000 and is less than £30,000,	five-eighths of a penny in the pound sterling.
Where the value is	£30,000 and is less than £40,000,	six-eighths of a penny in the pound sterling.
Where the value is	£40,000 and is less than £50,000,	seven-eighths of a penny in the pound sterling.
Where the value is	£50,000 and is less than £70,000,	one penny in the pound sterling.
Where the value is	£70,000 and is less than £90,000,	one penny and one-eighth of a penny in the pound sterling.
Where the value is	£90,000 and is less than £110,000,	one penny and two-eighths of a penny in the pound sterling.
Where the value is	£110,000 and is less than £130,000,	one penny and three-eighths of a penny in the pound sterling.
Where the value is	£130,000 and is less than £150,000,	one penny and four-eighths of a penny in the pound sterling.
Where the value is	£150,000 and is less than £170,000,	one penny and five-eighths of a penny in the pound sterling.

Where the value is £170,000 and is less than £190,000, one penny and six-eighths of a penny in the pound sterling.
Where the value is £190,000 and is less than £210,000, one penny and seven-eighths of a penny in the pound sterling.
Where the value is £210,000 or exceeds that sum, twopence in the pound sterling.

"THE GOVERNMENT VALUATION OF LAND ACT, 1896."

THE above Act provides for the periodical valuation of all landed properties in New Zealand, and for that purpose the colony is divided into special districts.

The first valuation was made as at 31st March, 1898, since which date valuations in many parts of the colony have been revised as circumstances required. An Amendment Act passed during the session of 1900 contains the amendments which four years' experience of the original Act showed to be desirable. As the principle of the latter remains unaltered, the amendments are practically confined to the machinery clauses and the clearer definition of terms.

The valuations are used for the following purposes: Land-tax, local rates (in cases where rates are levied on the capital or on the unimproved value), stamp duties, and duties under "The Deceased Persons' Estates Duties Act, 1881"; for advances and investments on mortgage of land made by the Post Office, Government Insurance Department, Public Trust Office, Government Advances to Settlers Office, and the Commissioners of the Public Debts Sinking Funds. The valuation is also used for the guidance of the Government in transactions under "The Land for Settlements Act, 1894," and "The Public Works Act, 1894."

Valuations are supplied by the department on payment of the prescribed fee.

The cost of making the valuation is divided proportionally between the departments mostly using it and the local authorities, while separate fees, for supplying individual valuations to those requiring them, are provided for by regulation.

RATING ON UNIMPROVED VALUE OF LAND.

IN August, 1896, an Act was passed by the General Assembly termed "The Rating on Unimproved Value Act, 1896," for the purpose of affording an opportunity to local bodies of adopting the principle of rating which is expressed in the title of the measure. It is entirely at the option of the bodies to adopt the system, and provision is made for a return to the old system of rating, if desired, after three years' experience of the new one. The Act provides

that a proportion of the ratepayers on the roll, varying from 25 per cent. where the total number does not exceed 100, to 15 per cent. where the number exceeds 300, may by demand in writing, delivered to the chairman of the district, require that a proposal to rate property on the basis of the unimproved value may be submitted to the ratepayers, whose votes shall be taken between twenty-one and twenty-eight days after delivery of the demand. The poll is to be taken in the same manner as in case of a proposal to raise a loan in the district under "The Local Bodies' Loans Act, 1886."

Under the original Act it was necessary for a minimum number of one-third of the ratepayers to vote, and a majority of their votes carried the proposal. Now, under "The Local Government Voting Reform Act, 1899," the question of adoption or otherwise is decided by a bare majority of the valid votes recorded, irrespective of the number of ratepayers who have voted.

A rescinding proposal can be carried at a poll by the same means as one for adoption, but not until after three years have elapsed, and, *vice versâ*, rejection of a proposal bars its being again brought forward for a similar period. However, in the case of past polls at which the proposal to adopt the Act was rejected solely on account of an insufficient number of ratepayers recording their votes, it is now provided that a new poll may be held at any time.

The valuation-roll is supplied to the local authority by the Valuer-General under the provisions of "The Government Valuation of Land Act, 1896," and its amendment of 1900, and the definitions of "capital value," "improvements," "unimproved value," and "value of improvements" found in these Acts apply also to the Rating on Unimproved Value Act. Provision is made for adjustment of rating powers given under previous Acts to the Act of 1896 by fixing equivalents. Thus a rate of 1s. in the pound on the annual value under former Acts is to be considered equal to ¾d. in the pound on the capital value under the Act of 1896.

The adjustments are to be made so that the rates on the unimproved value shall be such as to produce as much as, but not more than, the rates under "The Rating Act, 1894." For instance, supposing a local authority has a rating power up to ¾d. in the pound on the capital value, then it can levy any rate in the pound on the unimproved value of land in its district *so long as the producing capacity of such rate is not greater than would be the producing capacity of a ¾d. rate on the capital value of the district.* When a fixed rate, under the older system of rating, is security for a loan, the Controller and Auditor-General is given power to interfere and fix the new rate himself if of opinion that the new rate on the unimproved value does not afford equally good security to the one to be given up.

The operation of the Act does not apply to water, gas, electric light, sewage, nor hospital and charitable-aid rates.

Up to the present time (23rd September, 1901) the local bodies that have submitted the question of the adoption of the Act to the ratepayers are as follow:—

"RATING ON UNIMPROVED VALUE ACT, 1896."

Results of Polls.

Auckland City	Rejected.
Cheviot County	Carried.
Devonport Borough	Carried.
Eketahuna County	Carried.
Feilding Borough	Carried.
Gore Borough	Carried.
Grey Lynn Borough	Carried.
Greymouth Borough	Carried.
Hamilton Borough	Carried.
Hokianga County	Carried.
Hokitika Borough	Carried.
Hunua Road District	Carried.
Inangahua County	Carried.
Invercargill Borough	*Carried.
Karori Borough	Carried.
Linwood Borough	Carried.
Manawatu Road District	Carried.
Maraetai Road District	Carried.
Melrose Borough	Carried.
Normanby Town District	Carried.
Onslow Borough	Carried.
Pahiatua Borough	Carried.
Pahiatua County	*Carried.
Palmerston North Borough	Carried.
Papakura Road District	Carried.
Pelorus Road Board	Carried.
Petone Borough	Rejected.
Picton Borough	Rejected.
Raglan County	Rejected.
Spreydon Road District	Carried.
Stratford County	*Carried.
Sumner Borough	Rejected.
Sydenham Borough	Carried.
Tauranga County	*Carried.
Taratahi Carterton Road District	Carried.
Timaru Borough	Rejected.
Waipawa County	Carried.
Waimate Borough	*Carried.
Waimate County	Carried.
Wairarapa North County	Rejected.
Woodville Borough	Carried.
Woolston Borough	Rejected.

Votes recorded.

	For.	Against.	Informal.
Auckland City	753	1,697	..
Cheviot County	165	41	..
Devonport Borough	356	109	..
Eketahuna County	149	21	1
Feilding Borough	268	56	1
Gore Borough	122	67	5
Grey Lynn Borough	140	71	2
Greymouth Borough	214	48	1
Hamilton Borough	77	52	..
Hokianga County	109	25	6
Hokitika Borough	212	53	3
Hunua Road District	60	2	..

* New poll taken under Act of 1900.

Votes recorded—continued.

	For.	Against.	Informal
Inangahua County	284	11	2
Invercargill Borough	386	174	4
Karori Borough	93	3	1
Linwood Borough	276	38	2
Manawatu Road District	105	10	..
Maraetai Road District	16	..	..
Melrose Borough	236	40	6
Normanby Town District	82	56	3
Onslow Borough	140	8	..
Pahiatua Borough	136	38	1
Pahiatua County	350	31	3
Palmerston North Borough	402	12	3
Papakura Road District	30	1	..
Pelorus Road District	98	41	..
Petone Borough	72*	5*	1*
Picton Borough	27	73	1
Raglan County	122*	20*	..
Spreydon Road District	141	57	4
Stratford County	399	23	2
Sumner Borough	27*	1*	1*
Sydenham Borough	353	193	..
Tauranga County	90	13	2
Taratahi–Carterton Road District	261	53	..
Timaru Borough	93	246	5
Waimate Borough	235	61	14
Waimate County	368	162	..
Waipawa County	462	28	3
Wairarapa North County	331	68	10
Woodville Borough	175	7	1
Woolston Borough	103	191	5

* As less than one-third of the ratepayers voted, the proposal was rejected under the original Act, and no new poll has been held under the Act of 1900.

"THE MUNICIPAL FRANCHISE REFORM ACT, 1898."

A SHORT account of the leading features of this measure is to be found on page 199, in the section relating to the local bodies in the colony.

OLD-AGE PENSIONS.

IN 1898 a Bill, introduced into Parliament by the Right Hon. R. J. Seddon, Premier, became law,* which provided for the payment of an old-age pension out of the Consolidated Fund (revenue of the General Government) to persons duly qualified, without contribution by the

* A Bill had been previously introduced in 1897, which, as amended by the lower branch of the Legislature, was transmitted to the Legislative Council, but thrown out by that body.

As a preliminary to the introduction of the Bill in 1897, an Act entitled "The Registration of People's Claims Act" was passed in 1896, under which persons aged sixty-five years or upwards, having resided twenty years in the colony, and whose income did not exceed £50 per annum, were allowed for a limited time to send in pension claims. This Act has been repealed, and all certificates granted under it cancelled, by the Old-age Pensions Act of 1898.

beneficiaries. The Act, however, only provides for payments out of revenue, for the purposes of the pensions, until the close of the second session of the present Parliament. [*By amendment passed in 1900 the limit as to time of the operation of the principal Act is rescinded, and the authority to pay made absolute.*] The conditions under which pension is granted are set forth in sections 7, 8, and 64 of the statute, as under:—

7. Subject to the provisions of this Act, every person of the full age of sixty-five years or upwards shall, whilst in the colony, be entitled to a pension as hereinafter specified.

8. No such person shall be entitled to a pension under this Act unless he fulfils the following conditions, that is to say:—

(1.) That he is residing in the colony on the date when he establishes his claim to the pension; and also

(2.) That he has so resided continuously for not less than twenty-five years immediately preceding such date:

Provided that continuous residence in the colony shall not be deemed to have been interrupted by occasional absence therefrom unless the total period of all such absence exceeds two years; nor, in the case of a seaman, by absence therefrom whilst serving on board a vessel registered in and trading to and from the colony if he establishes the fact that during such absence his family or home was in the colony [*By amendment passed in 1900, as an alternative condition in respect of residence an absence of four years from the colony is allowed, provided that the claimant was not absent during the year ended 31st October, 1898, and provided that the total period of actual residence is not less than twenty-five years*]; and also

(3.) That during the period of twelve years immediately preceding such date he has not been imprisoned for four months, or on four occasions, for any offence punishable by imprisonment for twelve months or upwards, and dishonouring him in the public estimation; and also

(4.) That during the period of twenty-five years immediately preceding such date he has not been imprisoned for a term of five years with or without hard labour for any offence dishonouring him in the public estimation; and also

(5.) That the claimant has not at any time for a period of six months or upwards, if a husband, deserted his wife, or without just cause failed to provide her with adequate means of maintenance, or neglected to maintain such of his children as were under the age of fourteen years; or, if a wife, deserted her husband or such of her children as were under that age:

Provided that, if the pension-certificate is issued, the pensioner's rights thereunder shall not be affected by any disqualification contained in this subsection unless the fact of such disqualification is established at any time to the satisfaction of a Stipendiary Magistrate; and also

(6.) That he is of good moral character, and is, and has for five years immediately preceding such date been, leading a sober and reputable life; and also

(7.) That his yearly income does not amount to fifty-two pounds or upwards, computed as hereinafter provided [*By amendment passed in 1900 the property and income of husband and wife is to be computed as belonging to them jointly, and their united yearly incomes, including the pension, is limited to £78*]; and also

(8.) That the net capital value of his accumulated property does not amount to two hundred and seventy pounds or upwards, computed and assessed as hereinafter provided; and also

(9.) That he has not directly or indirectly deprived himself of property or income in order to qualify for a pension; and also

(10.) That he is the holder of a pension-certificate as hereinafter provided.

64. This Act, in so far as it provides for the granting of pensions, shall not apply to—

(1.) Aboriginal natives of New Zealand to whom moneys other than pensions are paid out of the sums appropriated for Native purposes by "The Civil List Act, 1863"; nor to

(2.) Aliens; nor to

(3.) Naturalised subjects, except such as have been naturalised for the period of five years next preceding the date on which they establish their pension-claims [*By amendment passed in 1900, in the case of naturalised persons the term of qualification preceding the establishment of a pension-claim is reduced from five years to one*]; nor to

(4.) Chinese or other Asiatics, whether naturalised or not.

The full pension is £18 a year, payable in twelve monthly instalments; but for each £1 of income above £34, also for each £15 of accumulated property above £50, £1 is deducted from the amount of the pension.

The first instalment of the pension is payable on the first day of the month next but one following the date of the certificate.

For the administration of the Act the colony is divided into seventy-two districts, for each of which there is a Deputy-Registrar, controlled by a Chief Registrar at Wellington.

Each claimant for a pension must make application on a printed form. The said form is obtainable at any post-office, and when completed the claim is to be sent to the Deputy-Registrar for the district in which the claimant resides.

Each application is recorded in a book called "The ..... District Old-age Pension-claim Register," and then transmitted to a Stipendiary Magistrate, who, having fixed a day for investigation, notifies the claimant to attend, if his presence is considered necessary. If the claim is admitted, the Stipendiary Magistrate issues a certificate to the Deputy-Registrar, who on receipt enters the particulars in a book called "The ..... District Old-age Pension Register," after which a pension certificate is issued to the pensioner.

The particulars of pensions granted are entered on a weekly return form, which, with the Magistrate's certificate, is sent to the Chief Registrar for entry in the General Register of Old-age Pensions.

The particulars of instalments falling due are advised to the General Post Office on a schedule. Advice, authorising payment, is then issued to the Postmaster at the money-order office at which the pensioner desired the instalment to be paid. At frequent intervals the Accountant of the General Post Office furnishes a statement of

the payments made, from which the monthly instalments are entered on a card bearing the name of the pensioner.

At the due date of the instalment the pensioner may present his certificate for payment at the money-order office named in the certificate. A pensioner failing to collect his instalment within twenty-one days forfeits the amount, but may apply for a warrant of waiver within fourteen days of such forfeiture. [*By amendment passed in 1900 the currency of each instalment is for one calendar month, with power to the Colonial Treasurer to extend the period in special cases.*] If a pensioner is unable, through sickness or other reasonable cause, to collect his pension, he may apply to have an agent appointed to receive the instalments on his behalf. Should a pensioner desire to change the office of payment an application is to be made to the Deputy-Registrar for the district in which the pension is registered. The change is advised to the Chief Registrar by telegram, who notifies the postal authorities. A transfer of a pension-certificate from one district to another is effected by the Deputy-Registrar for the district in which the pension is registered sending a warrant to the Deputy-Registrar for the district to which the transfer is made.

The decease of all persons of the age of sixty-five years and upwards is notified to the Chief Registrar by the Registrars of Deaths in the various districts. By amendment passed in 1900 the right of pensioners to admission to charitable institutions is protected.

All matters affecting the payment of pensions are reported by the Deputy-Registrars from time to time.

The Act came into force on 1st November, 1898. The appointment of a Registrar followed; and in December the old-age pension districts were constituted, and Deputy-Registrars appointed for them. By the 31st March, 1899, a total of 7,487 pensions had been granted, which represented a yearly payment of £128,082, or an average pension of about £17 2s. A year later (31st March, 1900) the number of pensions in force was 11,285, representing a yearly payment of £193,718, and on the 31st March, 1901, the number in force, at each rate, was:—

NUMBER OF PENSIONS IN FORCE, AT EACH RATE, ON THE 31ST MARCH, 1901.

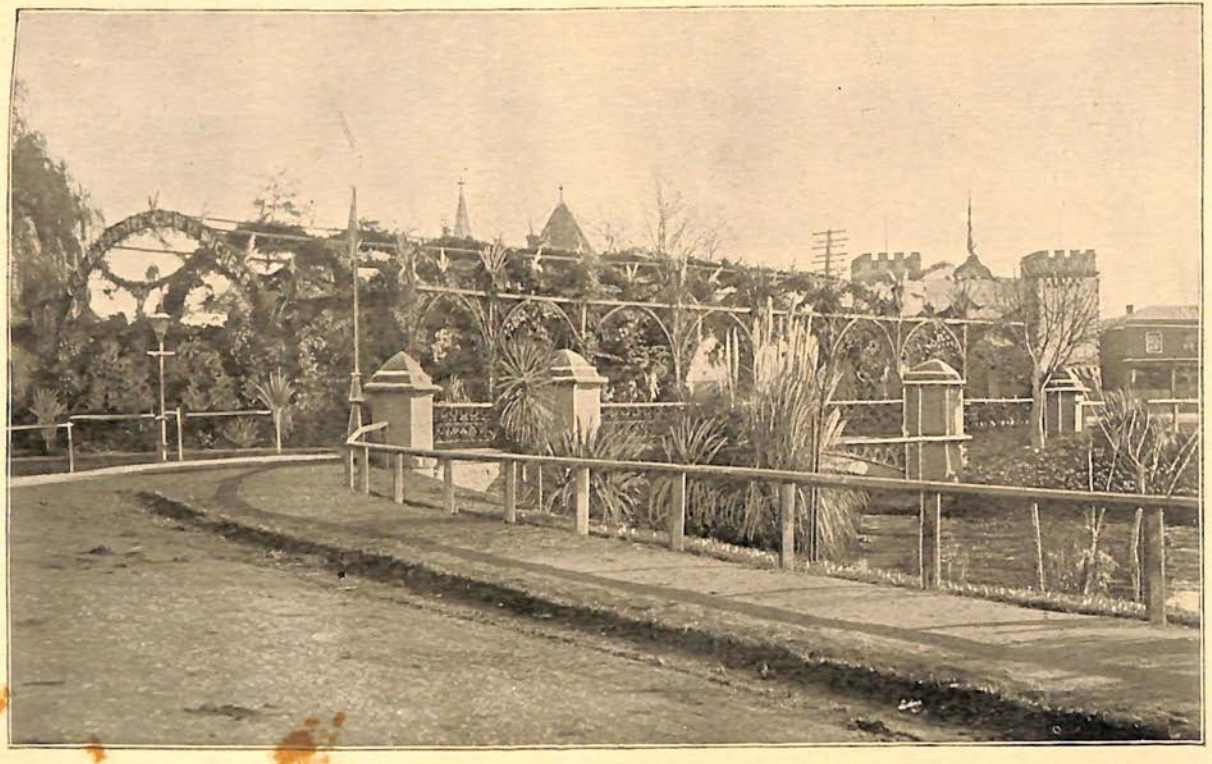
Yearly Pension.	Number of Pensions.	Amount.	Yearly Pension.	Number of Pensions.	Amount.
£		£	£		£
18	10,356	186,408	8	97	776
17	267	4,539	7	70	490
16	262	4,192	6	56	336
15	261	3,915	5	49	245
14	193	2,702	4	33	132
13	188	2,444	3	22	66
12	215	2,580	2	22	44
11	111	1,221	1	9	9
10	120	1,200			
9	74	666	Totals ..	12,405	£211,965

The number of pensions in force in each of the old-age pension districts is also given :—

NUMBER OF PENSIONS IN FORCE IN EACH OLD-AGE PENSION DISTRICT ON THE 31ST MARCH, 1901.

District.	Number of Pensions.	Amount. £	District.	Number of Pensions.	Amount. £
Akaroa ..	43	707	New Plymouth ..	230	3,911
Amberley ..	8	144	Oamaru ..	239	4,133
Ashburton ..	184	3,174	Opotiki	39	694
Auckland ..	1,015	17,034	Onehunga ..	281	4,577
Balclutha ..	131	2,238	Otaki	63	1,107
Blenheim ..	146	2,457	Paeroa	54	946
Chatham Islands..	5	90	Pahiatua ..	30	514
Christchurch ..	1,215	20,501	Palmerston North	159	2,691
Clyde ..	98	1,758	Palmerston (South)	50	846
Coromandel ..	121	2,138	Patea	23	397
Culverden ..	2	24	Port Awanui ..	48	864
Dannevirke ..	149	2,497	Port Chalmers ..	195	3,238
Dargaville ..	69	1,226	Queenstown ..	99	1,732
Dunedin ..	929	15,938	Raglan	94	1,569
Fairlie ..	8	144	Rawene.. ..	100	1,694
Feilding ..	86	1,490	Reefton.. ..	139	2,442
Geraldine ..	133	2,261	Riverton ..	117	2,020
Gisborne ..	96	1,634	Rotorua ..	71	1,276
Greymouth ..	467	8,311	Russell	137	2,285
Greytown ..	72	1,222	Stratford ..	27	476
Hamilton ..	178	2,992	Taupo	35	626
Havelock ..	7	119	Tauranga ..	86	1,502
Hawera ..	56	942	Te Aroha ..	30	519
Helensville ..	257	4,457	Thames ..	266	4,576
Hokitika ..	484	8,561	Timaru	144	2,477
Invercargill ..	540	9,278	Waimate ..	85	1,450
Kaiapoi ..	270	4,461	Waipawa ..	18	312
Kaikoura ..	27	467	Wairoa	111	1,682
Lawrence ..	206	3,503	Wanganui ..	196	3,341
Mangonui ..	82	1,416	Warkworth ..	81	1,292
Marton ..	88	1,535	Wellington ..	496	8,717
Masterton ..	81	1,385	Westport ..	266	4,659
Maungaturoto ..	45	749	Whakatane ..	107	1,913
Milton ..	113	1,893	Whangarei ..	158	2,714
Motueka ..	77	1,219	Whangaroa ..	35	601
Napier ..	243	4,087			
Naseby ..	87	1,506	Total ..	12,405	£211,965
Nelson	278	4,614			

With the above, a statement of the cost of administration for the year ended 31st March, 1899, is furnished, to show the initial expense. The Registrar of Friendly Societies is Registrar under the Old-age Pensions Act; the Deputy Registrars are mostly Clerks of Stipendiary Magistrate's Courts; the adjudication on claims is by the Magistrates; and the payments are made through the Postal Department.



Visit of H.R.H. the Duke of Cornwall and York : Government Arch, Christchurch.

COST OF ADMINISTRATION OF "THE OLD-AGE PENSIONS ACT, 1898," FOR THE FINANCIAL YEAR ENDED 31ST MARCH, 1899.

	£ s. d.	£ s. d.
Salaries—		
Registrar	100 1 1	
Deputy Registrars	40 3 10	
		140 4 11
Other expenses—		
Advertising and printing	16 6 0	
Clerical assistance	247 18 0	
Interpreting (S.M. Courts)	7 9 3	
Shorthand-writer (S.M. Courts)	19 0 0	
Travelling-allowances and expenses	76 2 2	
Sundries	3 7 9	
		370 3 2
Total		£510 8 1

The cost of administration for the second financial year (ending 31st March, 1900) shows a total of £2,360 8s. 0d.

	£ s. d.	£ s. d.
Salaries—		
Registrar	100 0 0	
Deputy Registrars	150 0 0	
		250 0 0
Other charges—		
Clerical assistance	1,124 3 3	
Contributions to Post-office	465 18 9	
Travelling expenses and interpreters' fees	308 13 7	
Sundries	211 12 5	
		2,110 8 0
Total		£2,360 8 0

The figures for the year ended 31st March, 1901, being summarised, are as follows:—

	£ s. d.	£ s. d.
Salaries—		
Registrar	100 0 0	
Deputy Registrars	200 0 0	
		300 0 0
Other charges—		
Clerical assistance	1,209 5 0	
Contribution to Post-office	500 0 0	
Travelling expenses and interpreters' fees	193 17 1	
Contingencies	176 11 10	
Rent of offices	35 16 8	
		2,115 10 7
Total		£2,415 10 7

The following remarks are taken from the Registrar's report on the transactions for the year ended 31st March, 1901:—

During the year ended the 31st March, 1901, 2,227 pensions were granted, 815 pensioners died, 227 pension-certificates were cancelled (inclusive of 202 renewal claims rejected), and 65 pensions lapsed through non-application for renewal. The number of claims rejected under the respective subsections of section 8 of the Act were —2 under subsection (5), 26 under subsection (6), and 174 under subsections (7) and (8).

The total amount paid in respect of pensions during the year was £197,292 13s. 6d. This amount includes £685 16s. 2d. charged to a vote provided for the purpose of paying forfeited instalments in special cases, and portions of instalments accrued up to date of death. The cost of administration was £2,415 10s. 7d.

The total amount of absolutely forfeited instalments during the year was £2,926 3s. 4d.

During the year, 532 pension-certificates were transferred from one old-age pension district to another.

NUMBER OF PENSIONS GRANTED SINCE THE ACT CAME INTO OPERATION; AND NUMBER OF DEATHS, CERTIFICATES CANCELLED, PENSIONS LAPSED AND IN FORCE AT END OF EACH YEAR.

Year ended	Number of Pensions granted.	Number of Deaths of Pensioners.	Number of Pension-certificates cancelled.	Number of Pensions lapsed.	Number of Pensions in Force at End of Year.
31st March, 1899 ..	7,487	38	6	..	7,443
" 1900 ..	4,699	786	65	6	11,285
" 1901 ..	2,227	815	227	65	12,405
Total ..	14,413	1,639	298	71	..

NEW ZEALAND CONSOLS.

THE purpose of "The New Zealand Consols Act, 1894," is, by providing for an inscription of such Consols, to give further facilities for the safe investment of savings. Practically, it establishes another branch of the Government Savings-Bank, with extended power of investment. Under section 3 the Colonial Treasurer is authorised to receive by way of deposits from persons in the colony sums of money up to £500,000; but the amount deposited in any one year must not be more than £250,000. The currency of such deposits is not to exceed forty years. The present issue matures 1st February, 1910. The rate of interest must not exceed 4 per cent. The actual rate being paid is 3½ per cent. per annum.

Post-office money-order offices throughout the colony are made use of to receive applications for inscription, and also for payment of the half-yearly interest on the amounts deposited. The Receivers are the Postmasters, and the Registrar under the Act is the Secretary to the Treasury, Wellington.

Regulations have been issued, under which every deposit of money for inscription is to be accompanied by an application according to the form given further on, which is to be signed by the applicant and countersigned by the Receiver (Postmaster) taking the deposit. The person paying the money receives an interim receipt pending official acknowledgment from the Registrar at Wellington. The receipt subsequently given by the Registrar to the Consols-holder is not a negotiable document, or of monetary value, beyond its being proof of the deposit for purposes of inscription. A holder of Consols can obtain

from the Registrar on application and payment of 5s. a certified copy of any entry in the register relating to his deposit.

There is provision for the transfer of Consols from one holder to another on application being made to the Registrar according to the second form given, and payment of 1s. fee.

In case an inscriber desires to make use of his deposit, or any portion of it, to the extent of £5, or a multiple of £5, he can obtain a Consols certificate which is payable to bearer, and is transferable by delivery. This certificate entitles the holder to receive interest half-yearly at the same rate as the original inscription, and also to payment of the principal sum on the due date.

The application for the certificate must be according to the form appended, and the fee payable is 1s. for every one hundred pounds or aliquot part thereof expressed in the certificate. There is also a fee at the above rate for inscribing the amount of a Consols certificate. The form of Consols certificate is also given.

Interest on Consols for which no certificate has been issued is payable by warrant, and such warrants are transferable by indorsement in the manner provided in the form.

Interest on Consols for which a certificate has been issued is payable to the bearer of the certificate on presentation at any post-office money-order office, or at the Treasury, Wellington (see the last form).

The Act provides for the deposit of money by minors, which may be acceptable to parents as encouraging habits of thrift in children.

As stated previously, the present issue of Consols has a currency to the 1st February, 1910, and carries interest at the rate of three pounds ten shillings for every one hundred pounds deposited; and an assured investment of moneys bearing a fair rate of interest for so long a term should secure, when well known, a large portion of the deposits of our thrifty population.

Application for Inscription.

To the Registrar of Inscribed Consols,
Treasury, Wellington.

I [We], , of , having this day deposited at the sum of pounds shillings and pence, for investment in -per-cent. New Zealand Consols, hereby request that the same may be duly inscribed in the books of your office in the name of .

Signature of depositor:
Full address of depositor, together with name of nearest money-order office:

Dated at , this day of , 19 .

Deposit duly received as above.

Signature of Receiver: .

Application for Transfer.

In consideration of the sum of , the receipt whereof is hereby acknowledged, I [we], of do assign the sum of pounds shillings and pence, being my [our] interest or share in the New Zealand -per cent. Inscribed Consols, under the "The New Zealand Consols Act, 1894," and all my [our] property, right, and interest in and to the same, and the dividends thereon, unto , of , his [their] executors,

administrators, or assigns, and the Registrar is hereby requested to transfer the same accordingly. The prescribed fee of is enclosed herewith.

Witness my [our] hand , this day of , 19 .

Witnessed by— Signature :

Signature :

Occupation :

Address :

I [We], of , do hereby accept the above Consols, and apply for the transfer thereof to me [us].

Signature :

Witnessed by—

Signature :

Application for Consols Certificate.

Place :

Date : , 19 .

To the Registrar of Inscribed Consols,
Treasury, Wellington.

I [We], , of , being the holder of New Zealand Inscribed Consols to the amount of pounds shillings and pence, do hereby make application for a Consols certificate in favour of bearer for the sum of pounds, to be issued to me [us] in accordance with and subject to the provisions contained in "The New Zealand Consols Act, 1894." The prescribed fee of is enclosed herewith.

Witness— Signature :

Signature :

Occupation :

Address :

Consols Certificate.

No. £

THE bearer of this certificate will be entitled to payment of the sum of pounds sterling upon presentation hereof at the Treasury at Wellington, New Zealand, on the day of , 19 , together with such interest, computed at the rate of sterling per centum per annum, as may be found to be unpaid on the before-mentioned date in accordance with the indorsements of interest-payments made hereon.

The principal and interest are a charge upon and shall be paid out of the accruing income of the Consolidated Fund of the colony.

Interest hereon at the rate of sterling per centum per annum is payable half-yearly, on the and in each year, at any post-office money-order office within the colony.

The amount of interest paid is to be indorsed on the back hereof by the person making such payment.

Dated at the office of the Registrar of Inscribed Consols, Wellington, , 19 .

, Registrar.

Countersigned—

, Controller and Auditor-General.

Entered, folio .

[On the back, indorsements of the half-yearly dividends paid by the Postmaster are to be duly made.]

Dividend Warrant.

To the Treasury at Wellington, or to the Postmaster at any post-office money-order office throughout the colony.

PLEASE pay or order the sum of pounds shillings and pence, being interest for half-year due , 19 , on £ -per-cent. New Zealand Consols.

£ : : .

, Registrar.

I hereby acknowledge to have received the above-mentioned sum in full payment of interest for half-year due as above.

Signature :

THE NEW ZEALAND GOVERNMENT LIFE INSURANCE DEPARTMENT.

THE annual report of the Government Life Insurance Department for 1900, which has been presented to both Houses of Parliament in accordance with the law, gives full particulars respecting the present financial position of the institution. The Commissioner says:—

New Business.—During the year 4,262 proposals were received for the sum of £879,005, of which 321 proposals were declined or deferred; of the remainder, 3,201, assuring £650,129, were completed. The annual premiums on these new policies amount to £21,418, in addition to single premiums of £495. The number of annuities granted was 13, for the sum of £509 per annum.

The number of policies existing at the close of the year was 40,368, securing, with bonus additions, the sum of £10,639,978 at death or maturity, and annuities, either immediate or deferred, of £27,222 per annum.

Income.—The income of the department for the year has been £286,731 from premiums and £136,955 from interest, making, with other receipts, a total of £423,700.

Claims.—Three hundred and seven policies, representing with bonus additions the sum of £92,675, became claims during the year through the death of the persons insured, a less amount than has been paid for any of the previous three years. 196 policies matured during the year, securing, with bonus additions, the sum of £58,543.

Accumulated Funds.—The Insurance Fund on the 31st December last amounted to £3,139,957, being an increase during the year of £142,276.

Balance-sheet.—On the 31st December, 1900, the total assets of the department amounted to £3,216,129, and were invested as shown in the following comparative statement:—

At 31st December, 1899.		Class of Investment.	At 31st December, 1900.	
Amount.	Percentage of Total Assets.		Amount.	Percentage of Total Assets.
£	Per Cent.		£	Per Cent.
1,333,378	43·4	Mortgages on freehold property	1,488,759	46·3
787,887	25·7	Government securities ..	727,899	22·6
559,562	18·2	Loans on policies	579,494	18·0
138,911	4·5	Local bodies' debentures ..	135,263	4·2
122,650	4·0	Landed and house property..	122,687	3·8
89,433	2·9	Miscellaneous assets ..	91,522	2·9
33,535	1·1	Cash on current account ..	64,916	2·0
6,225	0·2	Properties acquired by foreclosure	5,589	0·2
3,071,581	100·0	Total	3,216,129	100·0

It will be seen that there has been a further decrease in Government securities amounting to £59,988, and an increase of £155,381 in the amount lent on mortgages of freehold property. This change was authorised by "The Government Life Insurance Acts Amendment Act, 1894," and the amount of Government securities, which at the end of 1894 stood at £926,923, has from time to time been reduced by £199,024. and mortgages on freehold property increased by £971,679.

Tontine Fund No. 1.—The period of the Tontine Fund No. 1 expired on the 31st December, 1900, and the amount, £16,752 13s. 11d., has been distributed amongst those policyholders whose policies were in force at that date, the addition to the sums assured being £33,350 3s.

The fund was inaugurated by Order in Council, dated September, 1887, and policyholders were permitted to join until the 31st December, 1890, when it was closed for new entrants. Policyholders joining the fund were not allowed to deal with the bonuses allotted to them during the tontine period, and in the event of death or withdrawal the bonuses were forfeited to the fund, and accumulated at compound interest for distribution amongst those policyholders whose insurances remained in force at the 31st December, 1900.

During the time the fund was open 6,237 policies, assuring £1,734,591, joined, of which 275 became claims by death, or about 4½ per cent. of the number entering; 310 surrendered, and 2,103 lapsed, leaving 3,549 policies, assuring £994,427, in force at the close of the period.

In addition to the special bonus of £33,350 3s. from the Tontine Fund, the bonuses granted during the time the policies were in the tontine class, £130,512 7s., were released from the tontine conditions, and may now be dealt with in the same manner as non-tontine bonuses.

STATEMENT OF BUSINESS.

—	No.	Sum Assured.	Reversionary Bonus.	Annual Premiums. *1. Ordinary. 2. Extra.*	Annuities. *1. Immediate. 2. Deferred.*
		£	£	£ s. d.	£ s. d.
Policies in force at 31st December, 1899	39,366	9,558,166	783,536	1. 280,425 8 10 2. 3,843 5 11	11,284 3 4 12,526 1 3
New business, 1900	3,214	650,129	...	1. 21,251 9 8 2. 166 19 3	509 0 2 3,490 14 0
Bonus allotted	...	...	220,795	...	...
Total	42,580	10,208,295	1,004,331	1. 301,676 18 6 2. 4,010 5 2	11,793 3 6 16,016 15 3
Policies discontinued during 1900	2,212	511,259	61,389	1. 16,420 8 5 2. 303 6 7	297 0 8 291 0 6
Total in force at 31st December, 1900	40,368	9,697,036	942,942	1. 285,256 10 1 2. 3,696 18 7	11,496 2 10 15,725 14 9

REVENUE ACCOUNT OF THE GOVERNMENT LIFE INSURANCE DEPARTMENT FOR THE YEAR ENDED 31ST DECEMBER, 1900.

	£	s.	d.
Amount of Funds at 1st January, 1900	2,997,681	0	4
Renewal premiums—Assurance, Annuity, and Endowment	251,457	12	6
New premiums (including instalments of first year's premiums falling due in the year)	20,145	1	9
Single premiums—Assurance and Endowment	494	10	1
Consideration for annuities	4,633	14	6
Interest	136,955	7	11
Fees	13	19	10
	£3,421,381		

	£	s.	d.
Death claims under policies, Assurance, including bonus additions	92,675	4	0
Endowment Assurances matured, including bonus additions	57,357	16	0
Endowments matured ...	1,185	13	10
Premiums returned on endowments...	90	7	10
Bonuses surrendered for cash	10,496	12	2
Annuities	11,393	12	6
Surrenders	27,360	19	9
Loans released by surrender	19,432	9	3
Commission—			
New ... £12,391 17 1			
Renewal ... 1,996 0 8			
	14,387	17	9
Land- and income-tax ...	9,741	1	1
Expenses of management ...	37,302	19	3
Amount of funds at 31st December, 1900	3,139,956	13	6
	£3,421,381	6	11

BALANCE-SHEET OF THE GOVERNMENT LIFE INSURANCE DEPARTMENT ON 31ST DECEMBER, 1900.

Liabilities.	£ s. d.	£ s. d.
Total Assurance, Annuity, and Endowment Funds (as per Revenue Account) ...	3,139,956 13 6	
Claims admitted, proofs not yet completed	12,625 0 5	
Annuities	67 11 8	
Commission	159 4 6	
Medical fees	586 19 8	
Premium and other deposits	4,325 4 9	
Fire-insurance moneys in suspense	1,365 0 0	
Tontine Savings Funds ...	20,826 7 7	
Investment Fluctuation Reserve	36,296 19 7	
	£3,216,129 0 11	

Assets.	£ s. d.	£ s. d.
Loans on policies		579,493 19 5
Government securities ...		727,898 13 3
Municipal Corporation debentures		94,653 5 11
County securities		900 0 0
Harbour Board debentures		39,000 0 0
Town Board debentures ...		500 0 0
Landed and house property		122,686 19 4
Office furniture (Head Office and Agencies)		2,798 8 11
Mortgages on property ...		1,488,758 17 2
Property acquired by foreclosure		5,589 13 1
Overdue premiums on policies in force ... £4,611 16 3		
Outstanding premiums due but not overdue ... 35,347 9 1		
		39,959 5 4
Overdue interest 653 5 6		
Outstanding interest due but not overdue ... 5,108 17 9		
Interest accrued, but not due ... 38,451 16 11		
		44,214 0 2
Agents' balances		3,203 17 1
Sundry accounts owing ...		1,346 5 11
Cash in hand and on current account		64,915 15 4
		£3,216,129 0 11

SECTION II.

AGRICULTURE IN NEW ZEALAND.

[By M. Murphy, F.L.S.]

It is generally admitted that there is no part of the British dominions where agriculture, in its widest sense, can be carried on with so much certainty and with such good results as in New Zealand. The range of latitude, extending as it does from 34° to 47° South, secures for the colony a diversity of climate which renders it suitable for all the products of subtropical and temperate zones, while an insular position protects it from the continuous and parching droughts which periodically inflict such terrible losses on the agriculturist and pastoralist of Australia and South America.

Again, the climate, although somewhat variable, never reaches the extremes of heat or cold. So genial, indeed, is it that most animals and plants, when first introduced to the colony, assume a vigour unknown to them before.

North Island.

All the best forage-plants and grasses thrive most admirably, continuing to grow throughout the year with little intermission. Stock of every sort thrive and fatten rapidly on the pastures, coming to maturity at an early age without the aid of roots or condimental foods. All cereals flourish equally well, more especially Indian corn, which produces from fifty to eighty bushels per acre.

So full is the soil of plant-food that several continuous crops of potatoes or cereals may be taken with little apparent exhaustion. Wheat, oats, and barley thrive where the soil is not too rich; otherwise they produce enormous crops of straw, without a corresponding yield of corn. The tobacco-plant thrives well, as do also hops and sorghum, broom-corn, peanut, hemp, ramee or rhea (China grass), together with a large variety of economic plants, the growth of which will one day afford employment for a large population. In addition to these, all the British, Chinese, and Japanese fruits, with oranges, lemons, limes, olives, and vines (in the northern part), flourish abundantly, requiring but ordinary care. Potatoes are largely grown, and yield heavy crops.

Much of the country along the south-west and west coast is being rapidly taken up, and the primeval forest is fast disappearing before the settler's axe. For the most part, the soil is fertile, and the growth of grass and clover is extremely rapid and vigorous when sown on the surface after the felled timber has been destroyed by fire.

To the British husbandman it will seem almost incredible that the best pasture-grasses grow and thrive as they do with no other preparation than the ashes resulting from the burnt timber—no ploughing and no previous loosening of the soil—yet, in less than a year from the date of scattering the seed, this same land will fatten from five to six sheep per acre.

So rapidly are these fertile forest-lands being cleared and converted into pastures that the demand for stock (principally dairy) has greatly increased, and this demand must continue for a series of years before it is fully met.

Those who in the past have watched the progress of New Zealand, especially of the North Island, have always maintained that when the Maori difficulties and other impediments to settlement were over, the prosperity of the country would advance at a very rapid rate. The time has now come, and all that is required to expedite the coming prosperity is the settlement of our lands by a thrifty class of settlers.

There are millions of acres yet unoccupied, a great portion of which is of good quality, and only waiting the hand of man to make it carry, with very little cost, large herds of dairy stock, with flocks of long-wool and crossbred sheep. The west coast of the island is essentially a cattle-country. Considerable areas in the midland districts are adapted to long-wool sheep, as is also the country along the east coast. Much of the country may be described as being good sheep-land, a large portion of which is quite capable of carrying two sheep to the acre, and some of it as many as three or four.

Middle Island.

If the North Island has a splendid inheritance in her forests, the Middle Island can boast of her magnificent plain-lands, rolling downs, and vast mountain ranges, all of which, to a greater or less degree, have already been made to contribute to the wealth of the colony.

The central portion of the Middle Island presented to the first-comers a vast plain, covered only with waving tussock-grass, offering little or no obstruction to the plough.

Travelling south, the country assumes a different character: easy, undulating downs, well watered, here and there interspersed with fertile plains, the greater portion admirably adapted for agriculture, and all of it suitable for pastoral purposes.

The climate of the Middle Island is not so warm in summer nor so mild in winter as that experienced in the North Island. However, as has already been stated, there are no extremes of heat or cold. Much more might be said in praise of this portion of the colony. It is deemed necessary to say so much in order that readers may better comprehend the comparative ease with which every kind of farming is carried on in New Zealand as compared with other countries less favourably situated.

Agricultural Statistics.

Full particulars, with comparative tables showing the progress of agriculture in the colony, will be found in the statistical portion of this work.

The Past Season.

Notwithstanding the abundance of the last harvest it is matter for regret that the low price realised for the wheat crop has left very little margin for profit. It is more than probable that the area under this cereal will be considerably curtailed in the coming season. The decrease in the area cut for threshing last season was 63,284 acres, as compared with 129,285 acres in 1899. It must not, however, be supposed that the steady yearly decrease in this cereal is any indication of decadence. It only proves that farmers are finding it more profitable to devote more of their attention to the raising of lambs and fat sheep, and the production of butter and cheese. The same thing is going on in England. Thirty years ago the annual acreage under wheat was estimated at 9,550,000 acres, while the present average does not exceed 7,335,000 acres. The price of wheat is entirely regulated by the suppliers from outside countries, so that it matters little whether one crop is plentiful or otherwise, the prices are not affected unless, indeed, the supply is not sufficient for local wants, as happened two years ago, when wheat rose to 4s. per bushel. The Home demand had nothing whatever to do with the rise.

Referring to the pastoral industry, "Ovis," remarks:—

The pastoral industry must be described as being in a fairly prosperous condition. This may, upon the whole, be said without fear of contradiction, and in the face of a serious decline in the price of wool. During the early months of this year the price of sheep appeared to be somewhat unwarranted, and based largely upon purely local conditions; but the temporary recovery in the market for mutton and lamb went far to justify the prices that were given for sheep during the autumn. High prices at any time necessarily involve a considerable element of risk, and had the meat market at Home not taken an upward turn those who purchased store sheep during the autumn would have had to be content with a minimum of profit. As matters are, however, the pastoral industry has received additional impetus of considerable force, and it is now the general opinion that, barring events of an entirely unforseen and unfavourable character, the sheep market is right for at least another season. Of course, nobody knows for how long the market for the frozen product will remain in its present satisfactory condition; it may have taken a turn even before these words appear in print, but there is room for a substantial decline, and still leave a margin of profit to the producer. So long as high prices for stock are based mainly upon local circumstances a serious depression of the market is always to be feared, but when the market is based upon a highly profitable outlet

for the surplus production of mutton as well as upon local demand for legitimate stocking purposes, there is every reason for confidence in the future. It does not appear that the war in South Africa has had any material influence in the price of mutton, nor is it at all clear that it has anything to do with the falling off in the demand for wool. Matters like these, however, are dangers always hanging over our heads at any time and at all times, and perhaps as regards this it is as well to follow Sydney Smith's advice and take short views. Other things being satisfactory, one would hardly refrain from buying a line of sheep at current prices for fear of possible international complications.

A question of more immediate and direct interest is that of the supply and value of breeding ewes. It is probable that breeders have parted with their ewe lambs with somewhat more reluctance than in former seasons, and yet it is still feared that the ewe lambs have been sent to the freezing-works in unduly large proportion. In this respect our sheep-farmers are too prone to take short views of the future. It is an evil that seems bound to correct itself in the course of time, but in the meanwhile great harm is being done to the breeding flocks. Leaving out of consideration the necessity of increasing the total sheep stock, we do not require to hold back the total increase of ewe lambs in order to recruit the breeding flocks, but with increasing attention being yearly given to the growth of feed an addition to the total number becomes a necessity; and the mischief of it is that it is the best of the ewe lambs that are exported. One of two things must happen: either the export of ewe lambs must be materially checked, or else the price of breeding ewes must rule higher than it has done in the past relative to the price of other classes of sheep. When sheep were regarded as a mere adjunct to grain-growing operations the flock was apt to receive scant attention, and to many farmers one sheep was much the same as another; but now that the pastoral industry has come so prominently to the front, and with every likelihood of remaining in that position, it is becoming recognised that the flock is a subject which requires and which repays the most careful attention.

The prospects for wheat are such as to necessarily involve increased attention being given to the production of feed and a corresponding demand for sheep. When wheat-growing is prospering it circulates a lot of money amongst the farming community, but the benefit of it is not so generally felt as is the case when sheep are paying well. There is scarcely an acre of land in this country that is not capable of producing wool and mutton, while the land suitable for wheat-growing is comparatively limited. So far as Canterbury is concerned the production of mutton and fat lamb is undoubtedly affecting the price of land and the demand for it to a very appreciable extent. A few years ago land, except in the most favoured localities, could hardly be said to have a market value, but now that land has an avowed productive value it has also a corresponding capital value. A boom in land, such as was experienced

twenty years ago, is not to be anticipated, and is certainly not to be desired. Values then were of a purely fictitious and speculative character, and quite without foundation in productive value; but the gradually growing demand and cautious appreciation in price which is now to be observed is quite a different matter. There are doubtless more influences than one at work to bring about this result, but the prosperity of the pastoral industry takes the leading place. Land in Canterbury has an especial value from the fact that the greater part of it can be depended on for growing fat lambs. Many years ago it was foreseen that the successful establishment of the refrigerating industry must cause an appreciation of land values, but it was not foreseen that the result would be so long in coming about.

Cheap money is another factor which tells in favour of land values. It is also an undoubted fact that many farmers have been saving money of late years, and these savings must find an outlet; and it may be taken for granted that the bulk of such money will be invested in land or on land in one way or the other. Mortgages may be paid off, or more land may be purchased, or the money may be devoted to starting the sons of farmers on leasehold Government sections. In any case the demand for land is bound to be affected. The presence of a large cash purchaser in the market, such as is the present Government, must also exercise considerable influence. The mere fact of an estate being cut up and settled never fails in the long run to increase the value of other property in the same neighbourhood, for population always attracts population. And there is the further reflection that when the pastoral industry is the mainstay of the smaller as well as the larger holdings, and grain-growing takes a secondary place, distance from large towns and seaports becomes a matter of less vital consequence.

Wheat.

The Canterbury Plains, the great wheat-growing district of the Middle Island, extend 150 miles north and south, running inland from the sea for forty miles, the whole forming an area of about 3,000,000 acres. A great portion of this vast plain is admirably adapted for the production of wheat, barley, and oats of the best quality, the growing of which has been carried on extensively since the foundation of the colony. The total area under wheat for threshing in the colony for the season 1900–1901 was 206,465 acres, of which 146,668 acres were grown in Canterbury, the average yields being approximately 32 bushels per acre. The land is for the most part free from stones or impediments of any kind. Single-furrow ploughs are now rarely seen, double- and three-furrow ploughs being in general use, and an occasional steam plough. Three horses, occasionally four, with a man or a boy, can turn over three acres per day on the plains, at a cost of 5s. or 6s. per acre. A stroke of the disc or other harrow, followed by the seed-drill and light harrows, completes the operation of sowing.

Seed-sowing commences in May, and can be continued as weather permits through the winter, and in the heavy swamp-land (drained) on into September and even October. From 1¼ to 1½ and 2 bushels of seed per acre are usually sown, the quantity increasing as the season advances.

Good results are in general obtained by feeding-off the early-sown grain with sheep, followed by the harrows and roller. The average yield on the better class of soil in favourable seasons is from 40 to 60 bushels per acre of dressed grain. The usual general average for the whole colony may be set down at 25 to 30 bushels, according to the season. It must also be stated that the small-bird nuisance (principally the English sparrow) reduces the average by at least 2 to 3 bushels per acre of wheat, oats, and barley. As a set-off against this, however, the destruction of caterpillars and seeds of weeds must be credited to these feathered marauders. Another cause for low averages is the fact that wheat is sown on land entirely too light in quality for that cereal. It will, however, be noted that the general average yield of all our cereals is higher than that of most other countries except that of Britain herself.

Oats and Barley.

Otago and Southland districts excel in the production of oats, which is their principal cereal crop. The total area sown for grain under this cereal for the season 1900–1901 was 449,534 acres, being an increase as compared with the previous season of 51,291 acres.

The yield of oats in Otago and Southland varies from 40 to 80 bushels per acre, the cost of production being about the same as wheat—viz., £2 per acre when grown from grass-land, and £1 10s. from stubble.

Malting barley, of very superior quality, is grown in Nelson and Marlborough, where the soil and climate appear to be particularly adapted to its culture.

The growing of this cereal (barley) for malting purposes requires more attention than it has yet received in this colony. It is claimed for this crop that it will show a better result than wheat, for the following reasons: (1) It is less exhaustive to the soil; (2) it gives an average yield of from 10 per cent. to 20 per cent. more than wheat; (3) the growing crop in favourable seasons can be fed off twice, or even three times, to the advantage of the subsequent yield of grain. Land of a light and calcareous nature, but unsuitable for wheat, will give a barley thin in the skin, and particularly suited for malting purposes. Barley is not a difficult crop to raise, but there are certain points that need careful attention, which, if neglected, would probably result in the production of an inferior sample, which would hardly pay for growing. The use of substitutes for malt in the manufacture of beer has become so general that the demand for malting barley is not nearly so great as it should be were the use of substitutes prohibited—by Act of Parliament if needs be. If only malt were used the area under barley

would be largely increased, and a much more wholesome beverage could be supplied to the public. This is a matter which might well engage the attention of the Legislature.

Root-crops.

Potatoes: Potatoes are largely grown throughout New Zealand. On suitable soils very heavy crops are raised, it being no uncommon thing to dig from 8 to 10 tons per acre, although the general average is much lower, for the reason that unsuitable land is frequently devoted to this crop. The area under potatoes in 1900–1901 was 28,524 acres, as against 36,984 acres grown in 1900—a decrease of 8,460 acres. The bulk of the crop is planted without manure, but, where used, bonedust, superphosphate, blood-manure, or animal guano (which may be procured of first quality from the local manure manufactories), from 1 cwt. to 2 cwt. per acre, is applied with good results. The potato is, however, an expensive crop to grow, costing from £5 to £6 per acre, and it is perhaps the most precarious of all crops, as the prices fluctuate in a most erratic manner. In 1898 the price rose to £7 and £8 per ton; in 1899 it fell to £1 10s. and £2, and the crop of 1900 was barely saleable at £2, while the crop of 1901 has ranged in price from £3 to £5 per ton. Potato growers admit that £1 10s. per ton off the fork will pay better than £2 after being stored for any time. A feeling prevails amongst growers that if regular communication were established between New Zealand, the Cape, and the Islands, as well as China and Japan, a market would probably be opened up for produce, such as potatoes, onions, vegetables, fruits, &c., packed in cases or crates.

In Australia, with extended transcontinental railway communication, some one part of the continent will always be in a position to supply the wants of the other; it is only a matter of transport. In view of these contingencies it will at once be seen that New Zealand farmers will have to look further afield for a market for their surplus produce.

Land for potatoes is usually broken out of grass, skim-ploughed in autumn, ploughed deeply in spring, and thoroughly tilled; or potatoes may be grown in drills opened and closed with a double-furrow plough. The seed—15 cwt. per acre—is then ploughed in under every third furrow, the after-culture consisting of harrowing just as the crop is appearing over ground (by this means myriads of seedling weeds are destroyed); drill-grubbing, hoeing, horse-hoeing, and earthing-up being the subsequent operations. Heavy crops of wheat, oats, barley, beans, or peas can always be relied upon after potatoes, season permitting.

Turnips: The turnip crop of this season has been a fairly good one. On the plains of Canterbury the want of sufficient warmth of the atmosphere at the critical period of their growth had an injurious effect on thousands of acres. In the southern portion of the Island the crop will be sufficient for the requirements of stock-owners.

On virgin soil turnips can always be relied upon as a certain

crop without any manure, even with a single furrow and a couple of strokes of the harrow. But, as most of the land (at least in the Middle Island) has already been cropped, turnips cannot now be successfully grown without the aid of manure. In the nature of things, from a climatic point of view, farm-yard manure cannot be procured in sufficient quantity; artificial manures are therefore largely used, from 1 cwt. to 1½ cwt. of superphosphate of lime per acre being now applied with the best results, securing ample crops of sound roots, from 15 to 30 tons per acre. The seed is sometimes sown in drills on the flat, the manure being dropped in front of the seed by the same machine, from ½ lb. to 1 lb. of seed per acre being used; when sown broadcast a smaller quantity will suffice. Sometimes the manure is deposited in a liquid state by machines manufactured for the purpose, called water-drills. This system invariably secures a rapid and vigorous braird, forcing the young plant into the rough leaf, after which it is secure from the attack of the turnip-beetle, usually the first enemy of the young plant's growth. So soon as the turnip-plants reach the third or fourth leaf, they are thinned by a scuffler, made for the purpose, which is drawn across the drills, bunching the turnips and thoroughly loosening the soil. The drill-grubber and scuffler are used as required till the leaves meet. This kind of culture produces capital crops at a minimum of cost. In Otago and Southland, where Swede turnips are largely grown, the seed is sown in drills and the young plants are thinned out with the hand-hoe in the same manner as the mangold crop is treated in Canterbury and elsewhere. Large areas are sown broadcast, and, if found too thick, the harrows are run through them; in any case, a stroke of the harrows is a great help in promoting the growth of the plant. The varieties used are Devonshire Grey for early and very late sowing; Purple- and Green-top Aberdeen are the most generally grown. Swede turnips, from their proneness to the attack of the turnip aphis, are not so much grown, though they produce enormous crops in Otago and Southland, where the climate is more suitable. The turnip-crop is generally fed off by sheep intended for freezing. It is estimated that an acre of good turnips, with a little hay or oat-chaff, will fatten from eight to fourteen sheep. Turnip-sowing commences in November, and may be continued till the end of December. Stubble turnips may be sown in March, but this can only be considered as a catch-crop. It, however, often proves of great value, supplying an abundance of green food for ewes with early lambs. The area under this crop for the season 1900–1901 was 404,333 acres.

Rape is largely grown as sheep-feed, and may be sown either in early spring or immediately after harvest, the stubble being skim-ploughed or broken up with the spring-tined cultivator. This crop is invaluable in the early spring, and may be fed-off in time for oats or barley. Dairy-cattle, however, should not be fed on rape, as doing so destroys the flavour of the milk. This fodder plant ranks next in value to the turnip, and forms a most valuable adjunct to

that crop. The following notes are from the pen of a practical farmer, who writes from his own experience. He says :—

In my opinion rape, as a crop by itself, without grass, does best in medium to first-class land, as it bears feeding more frequently, and does not wither or go off with aphis in dry weather as soon as it does in the lighter class of land. I always put my best land into rape, following wheat, as then all weeds come up with the rape, and are eaten off by sheep or lambs before they seed ; then heavy land, in which weeds are generally so abundant, is kept clean in the cheapest manner, and saves the labour of hoeing, &c., the rape paying the rent while the sheep are eating the weeds. To do this effectively, the rape must be stocked pretty early, as cornbine and fat-hen grow so fast; and it may be necessary to fence off the dirtiest parts of a field, to force dry ewes or wethers to eat the weeds after lambs have had the first picking. Broad-leaf Essex is the variety generally sown in October and November for summer feeding, say, up to the 15th March, or later if it is a dropping season. Quantity of seed per acre depends on the class of land and the preparation given to the seed-bed. If the land has been ploughed twice and worked fine, 2½ lb. to 3 lb. is abundance on good land, and a shade less on lighter. If rape is sown in the autumn for spring feeding, with grass, during February and March, sow 3 lb. to 3½ lb. of seed, as some is destroyed by frost, &c., in winter, and it gives more feed when running to flower in the spring. I much prefer turnip to rape for fattening lambs and sheep after the 1st March. Purple-top Mammoth to feed first, and then Imperial Green Globe to follow. These turnips are sown on clean land, first or second week in November, with 200 lb. of manure per acre and 6 oz. of seed. I start feeding rape, as a rule, about Christmas, weaning all the lambs as I take off my first draft of fat lambs. In my opinion, it is a great waste to put the ewes on the rape with the lambs, unless the ewes are old and are wanted for the butcher, as rape without grass is not good for producing milk, but simply fattens the ewe. This does not apply to running rape and young grass autumn sown for spring feeding, but, even then, rape is bad for milk in wet weather. Rape by itself, as a rule, follows dun oats or wheat, as previously stated, with the object of keeping down weeds ; the first ploughing being done in July, giving twitch, &c., time to rot. To quote a well-known saying, "If farmers in New Zealand do not oust weeds the weeds will soon oust them." I do not grow rape for seed, preferring to buy good clean imported seed, free from weeds. A good crop of rape in a favourable season will fatten fifteen to twenty lambs per acre, all depending on the condition of the lambs put on from time to time, and the skill of the owner. When hay and oatsheaf chaff are cheap, as they usually are in New Zealand, it pays well to give lambs hay or chaff on late rape and early turnips, as it makes a certainty of their fattening quickly, more especially in a wet autumn, if the owner is going to ship his own, and not sell, as the lambs weigh like lead, and the seller does not always get the credit. Early ploughing in July, and rolling on the furrow and cross-ploughing later, is the secret of making the turnip crop a certainty, as the small plants on which the enemies of the turnip live through the winter are destroyed, and the flies, &c., are not exactly on the spot when the young turnip first appears—at least, there are much fewer, and have to come from a distance ; also, half, if not two-thirds, of the moisture comes from below, and if weeds and grass are continually growing the land cannot conserve its moisture, nor get any rest, the weeds consuming the food as nature generously makes it. The earth is also warmer when lying up ploughed : thus warmth and moisture, two great essentials in helping land to make its best return, are provided, and Nature, so bountiful in New Zealand, is given a chance to do her duty by man doing his.

Mangolds and Carrots are largely grown in some districts. They cost more money per acre than turnips to produce, as they must be hand-hoed ; nor are they so suitable a crop for cleaning the land. Turnip-sowing does not commence till November or December, affording ample time for the destruction of seedling weeds ; this important opportunity is largely lost in the culture of the mangold,

Visit of H.R.H. the Duke of Cornwall and York : Government Arch, Dunedin.

which is usually sown in October. Mangolds are, however, an invaluable crop on a stock-farm, as they do not reach their primest condition until the turnip-supply is exhausted, usually in August. From 30 to 60 tons per acre is not an uncommon yield of these roots, often without the aid of manure, on rich swamp land.

It must be pointed out that overgrown mangolds are not by any means the most profitable. M. Garold, director of one of the French agricultural stations, in a paper on the subject, refers to the extra expense of carriage involved with large roots, and states that the nutritive value of 15 tons of medium-sized roots is quite equal to that contained in double the quantity of large ones. These remarks are entirely borne out by Mr. G. Gray (lecturer on chemistry, Canterbury Agricultural College) in his report on the analysis of seven samples of roots submitted to him by the Canterbury Agricultural and Pastoral Association for analysis.

The following is an extract from the report:—

TABLE I.—PERCENTAGE COMPOSITION OF ROOTS.

—	Aberdeen Purple-top Turnip. (1.)	Aberdeen Green-top Turnip. (2.)	Swede Turnip. (3.)	Golden Tankard Mangold. (4.)	Tankard Mangold. (5.)	Globe Mangold. (6.)	Long Red Mangold. (7.)
Water	91·95	91·81	90·26	87·37	92·33	94·77	91·91
Sugar	3·18	3·88	5·15	8·59	1·21	1·76	2·62
Extractive matter ..	1·79	1·33	2·01	0·98	3·35	0·83	2·50
Fat, colouring matter, &c.	0·53	0·61	0·54	0·33	0·25	0·22	0·16
Albuminoids ..	0·51	0·58	0·53	0·68	0 50	0·35	0·36
Crude fibre.. ..	0·97	1·00	0 83	0·81	0·83	0·60	0·64
Ash..	1·07	0·79	0·68	1·24	1·53	1·47	1·81
Total ..	100·00	100 00	100·00	100·00	100 00	100·00	100·00

TABLE II.—CONDITION OF NITROGEN IN ROOTS.

Percentage of Nitrogen in Dry Matter of Roots.

Albuminoid nitrogen..	1·01	1·15	0·87	0·85	1·05	1·07	0·71
Non-albuminoid " ..	2·01	0 44	1·59	4·40	1·78	1·50	1·01
Total ..	3·02	1·59	2·46	5·25	2·83	2·57	1·72

Percentage of Total Nitrogen existing as Albuminoids and Non-albuminoids.

Percentage of nitrogen as albuminoids	33·44	72·32	35·36	16·19	37·10	41·68	41·27
Percentage of nitrogen as non albuminoids	66·56	27·68	64·64	83·81	62·90	58·37	58·73
Total ..	100·00	100·00	100·00	100·00	100·00	100·00	100·00

For the purpose of analysis, segments of each root, cut from the top to the bottom, were taken so as to represent the average composition of the whole. One of the main points shown in the analyses is the large percentage of water existing in roots; only in one case, that of the Golden Tankard mangold, does it fall below 90 per cent. In the dry matter sugar is the constituent present in greatest amount, the mangold just mentioned containing an unusually large amount, pertaining in this respect more to the character of a sugar-beet. The sugar present is mainly in the form of cane-sugar. The term "extractive matter" includes bodies of the pectore group, digestible fibre, &c., which are assumed to have a feeding-value equivalent to starch. The albuminoids indicated in the analyses are true albuminoids, or flesh-formers, the nitrogen not existing as such being shown in Table II. Roots, like other immature vegetable products, are characteristic in containing nitrogen, much of which does not exist as albuminoids, and consequently does not act as flesh-formers. Amides and similar bodies containing nitrogen exist, and also nitrates. Mangolds, especially, contain a large proportion of their nitrogen in the latter form. Crude fibre is that portion of the root which is assumed to be indigestible, having resisted the action of solvents similar to those secreted by the digestive organs; with this exception the whole of the dry matter in roots is assumed to be digested. The composition of roots depends largely upon the nature of season, soil, and manuring, especially the latter. Nitrogenous manures in excess tend to increase the amount of leaf at the expense of the feeding value of the bulbs, and also to lower the proportion of the nitrogen as albuminoids and increase that existing as amides, &c. Large roots, as a rule, contain more water than smaller ones of the same kind. The specific gravity or density of roots compared to water is a good indication of their feeding value; the greater this is, the higher, as a rule, will be the proportion of nutrient substances present.

As will be seen in the description of the roots examined, several of them were past the stage of maximum feeding value, as shown by a want of compactness in the flesh of the root. The amount of sugar in roots goes on increasing up to a certain point, after which it begins to diminish, being converted into woody fibre, and the root becomes pithy. The comparative feeding value of the several roots may be shown by the number of food units present. These are obtained by adding together the amounts of the albuminoids and fat, and multiplying the result by 2·5, and adding the number so obtained to the percentage of carbo-hydrates, the sugar, extractive matter, &c., present. This is done on the assumption that the fat and albuminoids are, commercially, two and a half times the value of the carbo-hydrates. The food units obtained in this way with the roots examined are as follows:—

	Food Units.
Golden Tankard mangold	12·1
Swede	9·8
Aberdeen Green-top turnip	8·2
Aberdeen Purple-top turnip	7·4
Long Red mangold	6·4
Tankard mangold	6·4
Globe mangold	4·0

Carrots are also a valuable crop, especially for horses; on sandy loams the yield reaches 15 to 20 tons per acre. Carrots impart a pleasant flavour to butter, and should be largely grown for dairy stock.

Fertilisers.

This industry has now assumed important dimensions—manufactured from the waste products of animals slaughtered for freezing. The demand for fertilisers must increase from year to year, as our lands become more frequently cropped. In the early days of the freezing industry, when the demand for turnips became general, the native-grass land (tussock) was then in its natural state. All

that was necessary was to turn this virgin soil over with a shallow furrow; harrow down, and sow the seed (a few ounces) to the acre, without any fertiliser whatever. A good crop was the inevitable result.

The plough has been over almost the whole of our available new lands. It is now found absolutely necessary to sow fertilisers with the seed to give the young plant a start. Assuming that 1½ cwt. per acre is used all over the 566,528 acres, the estimated area under root-crops this season, this would mean an annual demand for 42,490 tons, without taking into consideration that used for grain, orchards, &c. Professor Lowrey (of South Australia), the newly appointed Director of Canterbury Agricultural College, has had under his consideration the important question of the profitable use of artificial manures in growing wheat on dry, hot soils of the Mallee country. His experiments, extending over a series of years, have finally resulted in the utmost importance to the grain-growing farmers of those regions, as he has demonstrated beyond a doubt that artificial manures can be profitably used for that purpose. We have not the details of his experiments before us. No doubt the Professor will turn his attention to like matters as applied to New Zealand agriculture. One of the most practical farmers in New Zealand has, however, given it as his opinion that, with a proper course of rotation, it will be many years before it will be necessary to apply fertilisers to corn crops—except, indeed, in a few extreme cases. Experiments have been made with a view to testing how far fertilisers may be used for raising wheat on the thinner soils of the colony, with varying success. In some cases it has been demonstrated that the application of a nitrogenous manure resulted in an increased yield sufficient to justify the additional outlay per acre, in others the result was not favourable; however, the season has much to do with results from such experiments. The lack of moisture will nullify the good which might otherwise follow the application of fertilisers whether to root or cereal crops.

Notwithstanding the quantity of fertilisers manufactured in the colony, importations are made, principally from Australia. Mr. G. Gray, Lecturer on Chemistry at Canterbury Agricultural College, in a paper on "Soil Fertility" shows that the land is drained annually of 5,871 tons of nitrogen, 1,000 tons of phosphates, 2,438 tons of potash, and 1,006 tons of lime: so that there is room for still further enterprise in the manufacture of manures. Recognising the value of such deposits, the South Australian Government has offered a reward of £500 to the finder of a payable deposit of coprolites.

SEEDS.

Clover: Saving clover for seed has now become an established and a lucrative industry, adding materially to the farmers' income. Clover is sown with a spring crop, usually of corn, lightly grazed in the following autumn, and then reserved for a crop of hay, which,

according to the season, yields from 2 to 3 tons per acre when cut in November or early in December. Some farmers prefer feeding off with sheep in preference to mowing for hay. The after-growth is then allowed to flower and seed, which it does very freely. Thousands of humble-bees may be seen in the clover-fields during the months of January, February, and March. The seed ripens in March, and is then cut and dried, and threshed out by machines known as clover-shellers. An acre of clover may yield in hay and seed from £8 to £10. It must, however, be stated that, while a good crop of clover-seed is a most lucrative one, it is nevertheless a most precarious one. Owing to the lateness of the season of ripening, it sometimes happens that the fertilisation is imperfect, resulting in a majority of barren heads. This has given rise to a controversy as to whether the proper bee has been introduced. The point was referred to Miss Ormerod, the English entomologist, who settled the question in the affirmative.

White and alsike clover are now grown in considerable quantities. White clover yields enormously: as much as 300 lb. of alsike seed has been obtained per acre. These clovers are not so dependent on the action of the humble-bee for their fertilisation. They mature earlier, and are more easily threshed and cleaned than cow-grass and red clover.

Grass-seed Saving: All the most valuable British grasses flourish throughout New Zealand. Cocksfoot has been for many years a staple product of Banks Peninsula (Akaroa County), where the soil for the most part consists of decomposed volcanic rocks and vegetable mould. Large quantities of this seed are now raised in the North Island as well. The seed is of the finest description, frequently weighing 20 lb. to the bushel, 12 lb. being a standard bushel. Cocksfoot thrives on a very wide range of soil, from the richest to the poorest, preferring, of course, the former. It may be found on the dry stony plains of the interior, green and healthy, when the surrounding herbage, introduced or indigenous, has yielded to the heat of the summer sun.

Growing ryegrass for seed is also an important industry. The seed is usually gathered by stripping; sometimes the grass is cut and tied and afterwards threshed by machinery. The average yield is from 15 to 20 bushels per acre, weighing from 25 lb. to 32 lb. per bushel, 20 lb. being the standard weight. A common practice is to graze the land till midsummer; to take the stock off for a few weeks, and then to run the stripper over the ground. By this primitive method 10 bushels per acre are sometimes secured, being of the finest quality. Ryegrass-seed is usually in good demand; the price varies according to the season, the usual price however is from 2s. 6d. to 3s. 6d. and 4s. per bushel.

Meadow fescue, one of the most valuable of all the grasses for permanent pasture on good land, is grown both in the North and Middle Islands, but as yet not very largely. A noticeable instance of the value of this grass for pasture purposes was illustrated in a

paddock which came under the writer's notice. The paddock was laid off into three equal parts, and sown with perennial ryegrass, meadow fescue, and Italian ryegrass. When well grown, sheep were turned in. They at once commenced to feed on the fescue, eating it quite bare, while the perennial ryegrass was left almost untouched. The Italian ryegrass received considerable attention. The preference for the fescue was very marked. Growing grass-seed of all the finer kinds should be an important industry in New Zealand, but as yet very little attention is paid to it. All that is required is to select clean land and clean seed to commence with. Carefully conducted, the seed-growing business should prove a lucrative one.

Many of the indigenous grasses of New Zealand are possessed of considerable feeding value, but, unfortunately, few of them will stand too close feeding. The action of fire is especially injurious to most of them. Of recent years a great deal is being written about *Danthonia semiannularis* as a grass particularly adapted to some of the poorer soils in the North Island, where it is said to thrive admirably; it is also said to be able to resist the action of occasional grass fires. There are many varieties of Danthonias, from the giant, coarse-growing snow-grass or oat-grass, to the fine-leaved varieties found in almost all the natural permanent pastures. Mr. Kirk has under his observation on one of the State farms a very large number of grasses, native and introduced, and his report on the comparative value of each will be awaited with much interest, but time must be granted before any thoroughly reliable information can be given. It is only after a series of years that correct conclusions can be arrived at.

Small Seeds: New Zealand, from the nature of her soil and climate, offers a fine field for growing all kinds of farm and garden seeds. This circumstance has already attracted the attention of some of the larger seed-merchants of Great Britain, whose agents occasionally visit the colony with a view to inducing farmers and others to grow certain kinds of seeds. The industry is peculiarly adapted to small holdings, and well suited to young persons, the work being light and of an interesting character. Ready sale can be found for carefully-grown and carefully-cleaned garden seeds.

Other Crops.

Pulse: Peas and beans are largely grown for pig and horse feed, and for export; they form an excellent preparation for wheat. An extensive trade in peas of a certain description is done in the manufacturing towns of Great Britain; and efforts are now being made to secure a share of this trade for the colony by producing peas suitable for splitting for human food. The business should prove a most remunerative one. Thirty bushels of peas are considered a fair crop, while 40 to 70 bushels of beans are often secured. As showing the extraordinary fertility of some of the lands in the Canterbury District, it may be mentioned that beans and wheat have been grown

alternately on Kaiapoi Island for thirty years without any apparent diminution of yield, the crops of recent years being as abundant as those grown years ago; 40 to 50 bushels of wheat and 60 to 70 bushels of beans being the usual return per acre.

Cape Barley and Winter Oats: The demand for early spring feed has resulted in the growing of these plants for forage. Their extreme hardiness renders them well adapted for autumn sowing. If sown in March they are ready for feeding-off in May; they may be fed off again in July, and on till the beginning of October, when, if allowed to run to seed, they will produce 40 to 60 bushels per acre, or they may be ploughed in for turnips.

Tares are also grown, but not so largely as they deserve to be, especially for dairy stock. Mixed with oats, barley, or rye, they are excellent milk-producers; and when grown luxuriantly they destroy all kinds of weeds, and leave the land in fine condition for a spring corn-crop.

Lucerne: This permanent fodder-plant thrives admirably in most parts of New Zealand, yielding three to five cuttings in the year; and, if properly cultivated and well attended to, it will continue to yield liberal cuttings for seven or eight years. This is a most excellent crop for the small or large farmer, furnishing, as it does, an abundant supply of succulent fodder, in deeply-cultivated soils, during the drier months of midsummer, as well as in the early spring. All farm animals are partial to lucerne; pigs thrive admirably upon it. No farm should be without a well cultivated plot of this plant. In deeply-cultivated land lucerne will yield several cuttings during the season, no matter how hot and dry the weather may be. It is this drought-resisting quality which renders lucerne such a valuable fodder plant in Queensland and New South Wales.

Cost of Working a Farm in New Zealand.

When comparing the cost of working a farm in England with one of the same size in the colony, several points have to be taken into account, such as the climate, the soil, labour, and machinery. In the colonies wages are higher than in Britain; as a set-off against this, the colony can claim, firstly, that there are more fine working days in the year, that the fields are much larger, that the latest improvements in machinery have been introduced, that the soil is more easily worked, and that the genial nature of the climate renders it unnecessary to house stock during the winter months, at least in the North Island, thus saving the cost of attendance; secondly, that farming operations may be carried on continuously throughout the ploughing and sowing season; and, thirdly, that the paddocks are so large, and usually so level, that the double- and treble-furrow plough may be worked by one man or youth with three horses, thus equalising the cost of labour, as we have shown that one man, or even a boy, will be quite equal to two men or boys in the Old Country, so that after all the difference in the rate of wages is not so great as might appear at first sight.

The hay-crop is simply cut one day, raked into windrows the next, and in a couple more it is ready for stacking.

Wheat is cut and tied by machinery, the stooks requiring no capping. It is frequently threshed out of the stook in favourable seasons, thereby saving the cost of stacking and thatching; but this method is not recommended except in hot, dry seasons. When stacked, the stacks are rarely thatched, except, perhaps, on the weather side. This is a wise precaution, the neglect of which sometimes entails serious loss.

The manure bill, which is such a heavy item of annual expenditure with the British farmer, presses as yet very lightly on the farmers of the colony. It is, however, a notable fact that the use of fertilisers is becoming more general; 1 cwt. to 1½ cwt. of superphosphates per acre is used with the turnip and other root-crops, for the purpose of forcing the young plant into the rough leaf, when it will be out of one danger—the turnip-fly. It will nevertheless be seen that the colonial farmer has many advantages over the farmer of the Old Country.

It may also be pointed out that the application of one or two hundredweight per acre of superphosphate of lime produces better results in colonial soils than double the quantity would do in England, showing clearly that the natural virginity of colonial soils is not yet exhausted.

The labour question and the laws regulating it, and other surrounding circumstances, are tending to bring about a considerable change in the condition of things agricultural. There is a fast-growing desire on the part of the workers to acquire holdings of their own, however small, rather than to labour for others. The settlement of the land in small holdings is chiefly, if not entirely, responsible for this laudable ambition.

There can be no doubt but that the policy of land settlement as developed by the late Sir John McKenzie has come to stay, and it requires but little power of divination to predict that, in the near future, we shall have a thrifty and numerous body of yeomanry settled throughout the country, assuming that this policy is vigorously carried out—small capitalists, who have gladly availed themselves of the facilities offered by the regulations whereby none of their cash is required for the purchase of the holding, leaving it available for the acquirement of implements and stock, are enabled to acquire comfortable homes.

Live Stock.

Cattle: The total number of cattle in the colony for 1900–1901 was 1,256,680.

Horses: Horses, 266,245.

Sheep: If any evidence was required to show how splendidly New Zealand is adapted for the production of sheep, it would be found in the fact that, according to the latest returns, the sheep stock of the colony up to the 30th April, 1901, was 20,186,784.

This is a remarkable result when it is considered that 1,585,238 sheep and 1,351,145 lambs were frozen for export in 1900.

The returns made up to the 30th April, 1900, shows the distribution of the flocks of the colony to be as follows: Merinos, in the North Island, 146,496; in the South Island, 2,566,757. Other pure and crossbreds—North Island, 9,851,677; South Island, 6,790,265; or a grand total of 19,355,195.

Pigs: The stock of pigs, according to the last returns, is set down at 250,975 as against 249,751 in the previous year, showing an increase of 1,224. There is still room for an enormous extension of this industry. With wheat at 2s., oats at 1s. 3d., per bushel, and an abundance of mangolds and carrots, Canterbury alone could do with double the stock of breeding sows now on hand.

SHEEP.

Sheep: New Zealand has proved itself admirably adapted for the breeding of all classes of sheep, from the fine-combing merino to the strongest type of Lincoln. The merino occupies and thrives on the wild lands of the colony, from the snow-line to the border of the plains, as well as on the drier portions of the plains. The merino ewe furnishes the foundation for all the crossbred varieties. On the rich moist soils the Lincoln and Romney Marsh sheep flourish, while the finer English and Border Leicesters occupy the drier lands.

Crossbred Sheep: Those bred from merino ewes and longwool rams, or from crossbred ewes with Down rams, are the most suitable for the frozen-meat trade, and are known as "freezers."

The dapper little Southdowns flourish wherever crossbreds thrive. Their more ponderous cousins, the Shropshire and Hampshire Downs, have their admirers, especially the Shropshire, which are largely used for crossing, with a view to producing early-maturing lambs. English Leicesters are also much sought after for this purpose, particularly in the Middle Island, where "prime Canterbury" mutton is produced.

Shearing commences in September, and is continued till January. The usual price per hundred is from 15s. to 17s. 6d. Shearing-machines are now largely used.

The average clips for the various breeds of sheep are approximately as follow: Merino, from 4 lb. to 7 lb.; quarter-breds, about 6½ lb.; half-breds, 7½ lb.; three-quarter-breds, 8½ lb.; Leicester, 10½ lb.; Lincoln, 11 lb. Of course, very much larger clips are obtained from special flocks, as much as 25 lb. to 30 lb. per sheep; but the above figures represent general averages.

The staple of New Zealand wool, especially the long-wool and cross-bred, is remarkable for its freedom from breaks and other imperfections incidental to countries subject to long droughts and scarcity of feed.

The most profitable sheep for New Zealand is that which combines the best fleece and the most suitable carcase for freezing purposes, together with early maturity. This is the class of sheep which some

sheep-breeders have set themselves to produce. Whether such an animal, having fixity of type, can be evolved, remains to be proved; so much depends on the feed, situation, and soil.

The capability of New Zealand for producing mutton has not yet reached its limit. When the frozen-meat trade was first seriously considered, an assertion to the effect that the colony could soon find 1,000,000 sheep per annum for freezing without impairing the breeding-flocks was treated as highly chimerical by sheep-breeders of long experience. The annual output of sheep and lambs is now about three millions. Twenty-three freezing-factories have been established, with a total freezing capacity of 3,665,000 carcases per annum. But, while congratulating the colony on the rapid development of the frozen-meat trade, it must be borne in mind that in Argentina strenuous efforts are being made to secure a share of the frozen-mutton trade carried on by New Zealand with Great Britain; Australia is also striving hard to share the trade with New Zealand. It must be admitted that with cheaper land, and a closer proximity to the markets of the world, Argentina will necessarily be a very formidable rival with Australasia. The only way to keep command of the market is to ship nothing but first quality mutton and lamb. The development of the frozen mutton industry, especially that of our rivals, may fairly be gauged by the following facts: In 1899 the importations of frozen mutton into Great Britain were valued at £5,439,707. Of this vast sum Australasia contributed £3.282,976; the foreign countries contributing the balance of £2,156.731 were Argentina, £1,490,166; Holland, £629,040; Germany, £1,503; other countries, £36,022.

Raising lambs for the frozen-meat trade has become one of the mainstays of colonial farmers, large and small, especially the latter. As with butter and cheese, the returns are ready cash. The past season may be regarded as a record one for lambs, which have been selling for freezing purposes at prices ranging from 11s. to 17s. 6d. a head, a few exceptionally fine lots realising over £1. The magnitude of this industry may best be estimated by the fact that in the year ended 31st March, 1901, the colony sent away 1,353,272 lambs. This, with the fact of an export of 1,791,444 sheep, is sufficient evidence of the great and important changes which have come over the agricultural industries of this colony—a condition of things which has brought about a system of farming calculated to develop to the utmost the resources of the country. Some 535,992 acres were devoted to root and other fodder crops this season for feeding sheep.

"The New Zealand Flock-book," published in 1895, is now thoroughly established, and, with careful management, must prove of great service to owners of pure pedigree flocks. The Royal Agricultural Society of Victoria has published a Flock-book for British breeds of sheep. This is a step in the right direction, as flock-masters in South America demand a certificate to the effect that

the cattle and sheep purchased by them are duly registered in an authorised Herd- or Flock-book. The value of these books are now so fully recognised that all the distinctive breeds of sheep in Britain and elsewhere have their recognised registers.

Horse-breeding.

The climate of New Zealand is admirably adapted for the breeding and rearing of horses of all kinds, especially draught-horses. Indeed it would be difficult to find better Clydesdale horses than those bred on the limestone soils of Oamaru and elsewhere. Some of the best blue-blood of this breed has from time to time been imported from Scotland, with the result that the breed is now well established in the colony.

The light-horse stock of the colony has risen into note through the production of animals which have rendered themselves famous on the colonial turf. The demand for horses suitable for remounts for the cavalry service in India is a continuous one, affording a ready market for the proper stamp of animal; shipments have from time to time been made to that country with varying results. The fact that large numbers of the horses purchased for the troops in South Africa came from America clearly shows what a good field we should have in this colony for the production on a large scale of this class of horse.

With a view to bringing the use of pure-bred sires within the reach of small selectors in the outlying blocks the Government have imported a few first-class horses and bulls of the most approved types, which cannot fail to have a most beneficial effect on the stock of the country.

Cattle.

The colony possesses all the best strains of blood, and this is evidenced by the superior class of cattle to be met with throughout the settled districts, especially in the show yards. There are two Herd-books published by the Canterbury Agricultural and Pastoral Association—one for shorthorns, the other for breeds other than shorthorns. The value of properly kept herd-books is now fully recognised in South America, as all imported stud animals are required to be registered in some herd- or stud-book. New Zealand is free from any of the diseases so disastrous to horned stock in other countries. It is said that Iceland is the only other spot on the earth which enjoys the same immunity. With a view to maintaining this enviable position, the Government have prohibited vessels carrying live-stock from infected colonies touching at any of the ports of New Zealand except under certain conditions. This action is deemed necessary, owing to the prevalence of pleuro-pneumonia in Australia.

Dairy Stock.

The breeding of first-class dairy stock offers a field for profitable investment. Milking-cattle now command a fair price, and will continue to do so. The rearing of well-bred heifer calves will repay all

the time and trouble bestowed thereon. They must, however, be of exceptionally good quality and from fine milking strains. Separated milk, although relieved of its butter-fat, loses little of its feeding value; the addition of a little linseed meal will restore the fatty constituents, which, however, are not the most valuable for feeding purposes. Ground oats, wheat, or barley added to the linseed mucilage will render calves fit for the butcher in a comparatively short time. An acre or so of European flax should be grown upon every farm where stock-rearing is carried on. The fattening of calves for export has not yet been attempted in the colony, although there is a very large and lucrative market for veal calves in London, ranging from £4 to £6 and £7 per head. Much has still to be done in the way of improving the dairy stock of the colony. The yield of milk from fairly good milking-cattle is approximately 500 gal. per annum, although 700 gal. per head are frequently obtained from selected herds. The average quantity of milk obtained will no doubt be increased as more attention is paid to breeding, and proper feeding. The general management and feeding of dairy stock is a question demanding immediate attention. Kind treatment is essential to success; clean pastures, clear running water, and grasses of the best quality are all factors fully recognised wherever dairying is successfully carried out.

The average yield of butter from milk passed through the separator is 1 lb. for every 2½ gal. of milk of 10½ lb.; so that the average cow produces annually 200 lb. of butter, or 500 lb. of cheese, which, estimated at 4½d. per pound, will be worth about as much as the butter.

The Dairy Industry.

This industry has flourished throughout New Zealand during the past year. Although the milk supply in some districts was curtailed for want of feed, the percentage of cream was greater in proportion. The export of butter for the year ended 31st March, 1901, reached 184,553 cwt., valued at £790,169; and of cheese, 109,234 cwt., value £249,017: or a total of £1,039,186. This industry is capable of much greater expansion without even increasing the number of milch cattle, but by improvement in breeding. The Government have spent large sums of money in teaching the art of butter-making by the factory system. Till recently nothing was done in the way of encouraging the breeding of better strains of cattle for the production of milk of superior quality as well as quantity. The Government, recognising the importance of encouraging a better strain of dairy cows, have imported a few first-class sires for the use of those dairy farmers who are not in a position to secure the best sires for their purpose. The service of these animals will be fixed on a nominal scale, and will only be available for selected animals. It will thus be seen that this business has now developed into one of the settled industries of the colony, resulting in the introduction of dairy experts, whose business is to instruct the dairy farmers and factory-owners in all the most approved methods of butter and cheese

manufacture. Graders are employed examining all butter and cheese for export, who brand each packet with its proper quality. Factory-owners now recognise the fact that it is folly to pay freight on any but the best quality; and this remark applies to grain and meat as well. We have to compete against Canada, the United States, Denmark, Australia, and the Argentine. New Zealand dairymen must, therefore, endeavour to raise dairy cattle which will yield the maximum of milk of the best quality; in fact, nothing but intense farming will pay in the future, applied to every branch.

The sterilising of milk to destroy the germs of diseases like tuberculosis is a wise precaution. The operation consists of heating milk up to a certain temperature, and cooling it rapidly, a process which has been found to destroy the bacillus of tuberculosis known to be present in the milk of affected cattle. The Government veterinaries are employed examining the cattle, and a large number are annually tested with tuberculin.

Pigs.

These useful adjuncts to the dairy should hold a very important position on almost all arable farms. The favourite breed in New Zealand is the improved Berkshire. The large and small breeds of White Yorkshire are also to be met with, but are not so generally approved of as the black pigs. The Tamworth pig has grown in favour with pig-breeders, as they answer admirably for crossing with black pigs. They are sought after for producing bacon pigs, making more lean meat and longer sides than the pure Berkshires. Pigs require no better attention than a good grass paddock, with a liberal supply of roots, and a little unthreshed pea-haulm for a few weeks before killing, with plenty of water, and shelter from the sun during the warmest summer months.

The breeding, rearing, and fattening of pigs is a source of wealth which is capable of considerable expansion. Several plants for the mild curing of bacon have been set up at the various freezing-factories, and by private persons and firms, many of whom are prepared to purchase an almost unlimited number of suitable animals, at prices which should prove remunerative to the grower. The establishment of properly appointed pig-farms is a somewhat costly undertaking, as all the fences must be pig-proof. Doubtless this consideration has had a deterrent effect upon some, while others find the breeding of lambs a sufficiently profitable undertaking, besides causing much less trouble. The industry is growing with the increased demand and the satisfactory prices offered for properly fed pigs. There is, however, room for an enormous expansion of this branch of rural industry.

Poultry.

The efforts made by the Government to foster this industry are gradually producing the hoped-for results. The dissemination of a better class of poultry is showing good results already. Farmers

are beginning to see that their poultry-yard should form no mean auxiliary to the general return from the products of the farm. With such a climate as we have, there need be no difficulty in raising hundreds where dozens are now produced. The department in Victoria has done much to foster this industry amongst their farmers. They receive the poultry in large numbers at the Government refrigerating stores, where they are sorted, packed, and frozen for shipment, with very good results.

The Fruit Industry.

From the North Cape to the Bluff Hill, in the extreme south of the Middle Island, the climate and soil are, for the most part, eminently adapted for the growth of a large variety of fruits. Generally speaking, pears, plums, quinces, apricots, figs, walnuts, cherries, gooseberries, currants, strawberries, and raspberries grow luxuriantly, producing abundant crops of fruit: In the Auckland District, oranges, lemons, and limes flourish: many groves are now bearing, and afford light and pleasant employment to a large number of persons. This employment will go on increasing as the trees become older. The olive flourishes in the North Island, bearing heavy crops, and the manufacture of oil will assume important dimensions at no distant date.

Vine-growing is also carried on with tolerable success in many districts; tons of fruit grown under glass are sold in the Auckland markets annually. Signor Bragato, an Italian wine expert, who visited this colony in 1895, gave it as his opinion that there are numerous localities in both Islands admirably suited for growing vines for the manufacture of wine and raisins.

Away in the far north the banana grows and ripens its fruit, but it is not thought that it will ever enter into successful competition with those imported at so cheap a rate from the Pacific Islands.

Extensive orchards of apples have existed in Auckland for many years, and are still capable of producing an abundance of fruit, if kept free from codlin-moth and other pests. Orchard-planting is progressing, and must one day be a very important industry. Central Otago will also become a large fruit-producing district, being free from violent and scorching north-west winds. All the fruits of the temperate zones flourish there; all that is required is a railway to tap the district.

The manufacture of cider is already assuming considerable dimensions, opening up a ready market for surplus fruit. The colonial-made article is rapidly coming into favour with the general public.

The drying of fruit has been fostered by the Government, who sent an expert through some of the apple-growing districts, giving practical lessons in the art of artificial fruit-drying. A great deal more might also be done in bottling fruits, and the manufacture of fruit-wine, if only for home consumption. These are industries hardly yet touched, but as the orchards mature they may be expected to expand.

The manufacture of jam is carried on with much success, but there is plenty of room for further development in this industry.

As the picking and packing of fruit is a matter of vital importance to fruit-growers, the following paper on the subject by Mr. Henry Bloxham, of Roxburgh, which was discussed at the Horticultural Conference held in Dunedin in June, 1901, will prove of value to persons engaged in the industry. Mr. Bloxham says that—

It must be clear to all engaged in fruit culture that when good fruit is grown, the next matter for consideration is the best method to be employed to place it before the public in a presentable manner. Many growers evidently have the impression that if they grow good, large, wholesome fruit that is all that is necessary to success. This is a very great mistake, and, after twelve years' experience in grading and preparing fruit for various markets, I am more than ever convinced that careful gathering in the crop and judicious packing more than compensates for the time and labour bestowed. There is not a season but an enormous quantity of fine, luscious fruit is utterly destroyed through neglecting to pick and pack carefully. To gather and select properly requires both experience and judgment. As I cannot furnish growers with these qualifications, I have to content myself by making a few observations on things in too many instances sadly neglected. As there are so many purposes for which fruit is used, and dessert being of the greatest importance, it demands special attention, because if picked too green it will not come up to flavour, and if too ripe it will not bear transit. Nothing but experience and keen observation will furnish growers with the requisite knowledge when to gather in their crop. To give an illustration: If we pick the early red apricot before they are well coloured and come away free from the stem, they will not ripen, but become spongy; if, on the other hand, we take the Moorpark directly they begin to show a change in colour, they ripen and lose very little of their flavour. The same may be said of the peach, especially the freestone varieties.

If fruit is gathered on a warm day it should be carefully put away in the shade or some cool place, and on no account left in the sun's rays. Before the case is nailed down it must have every opportunity to cool, as it retains the heat for some considerable time. Very often, after it has been picked two days, on opening the case it is quite warm. This brings it to a state of ripeness too rapidly. Any falling from the tree or hand should be excluded, as one bruised will seriously damage the whole case. A very large percentage of fruit is lost from this cause. Several growers suffer and obtain low prices because they entertain the idea that size is all-important. As a result, if their fruit is large they suppose that will cover every other defect; but unless it is clean and bright it should be packed separately, as any diseased specimens will condemn the case. As trees seldom, if ever, ripen the whole of their crop at the same time, two or three pickings are required, and unless this plan is adopted there cannot be a uniformity of ripeness. All fruits intended for canning purposes require the same attention as for dessert. It need not be quite as ripe or as large, but should be well matured, free from bruises, scale, fungus, and other diseases. The small and inferior specimens can be picked for jam and culinary purposes; but purchasers require more than skin and stones, so it is always to the grower's advantage to keep back very small ones and all that are badly marked or diseased. Honest procedure gives confidence, and eventually proves advantageous to all concerned.

Though packing fruit may not require as much experience and judgment as gathering, yet it does require both care and attention. There should be in every case a uniformity of size and ripeness. Too often large is mixed with small, and dead-ripe fruit mixed with fruit as hard as potatoes—result, agent blamed for not getting satisfactory prices. There exists a diversity of opinion among growers as to the most suitable size of case. From observation, I prefer for stone fruit 14 in. by 28 in. by 6 in. deep for whole case, 7 in. by 28 in., same depth for half-case, with divisions in the centre. The half-case is very suitable

for cherries and black currants. Strawberries, except those sent in barrels to factory, should be packed in crates, the best in chip pummets holding from 1 lb. to 3 lb. Cardboard boxes are not suitable, as they give an unpleasant flavour to the berries, and have not sufficient ventilation. Good fruit of any kind should not be sent in old, dirty cases. If well grown and well and carefully sorted and packed few, if any, can resist buying. The nice clean look and neat appearance is more valuable than is generally supposed. Cases lying in fruiterers' yards for months, harbouring garden pests, &c., are not fit to pack food in for human consumption. Let all cases be lined with paper, great care being exercised in putting in the fruit, which should be handled as carefully as if packing eggs. The object in using the paper is twofold—it has a much smoother surface and prevents friction; it likewise excludes both dust and dirt. No fruit requires greater care in packing than peaches. I have not seen any placed on the market that will bear comparison with those sent by some from the Teviot Fruitgrowers' Company. Their method is as near perfect as possible. If this were not so the rough handling and the distance of over forty miles in wagons before reaching the railway-station would reduce the whole to a pulp. The case is 14 in. by 28 in. by 6 in. deep, is laid on its flat on a bench with slight slope, the four boards are removed, and the case lined with clean paper. A piece of paper 4 in. or 5 in. square is placed in the palm of the left hand, the paper containing the peach is then lifted into the case and packed in rows. As soon as the row is complete another sheet of paper is placed to cover it, and so on till the case is full. It is a mistake to pack peaches like Italian lemons. The paper should only be drawn up the sides of each layer of fruit, leaving the top uncovered. The next sheet of paper prevents contact. There is a possibility of using too much paper, and thus preventing the heat from escaping. Another method employed is to pack in rows with paper only on top and bottom. This is fairly successful, but, in my opinion, not so good as the first method.

As I am afraid my paper will be too long, I shall only make one other observation. Every case requires to be as full as possible without crushing or bruising. If cases are only partly filled, the jolting against the top of the case, with friction, will spoil the fruit, and make it unsaleable. In conclusion, fruit of any kind cannot be made too attractive. Everything about it should have a clean and wholesome appearance. There are few things so pleasant to look upon as well-grown, carefully-picked, and well-packed fruit, and those who best succeed in placing such on the market need not fear obtaining a fair remuneration for the labour they bestow, besides giving pleasure to seller, buyer, and consumer.

TREE-PLANTING.

With a view to encourage the planting of trees, the Government some six years ago introduced the popular American institution of Arbor Day. It is, however, a matter for regret that New Zealand settlers have not as yet entered into the spirit of the institution, as it was hoped they would. Millions of trees have been planted in this way in the United States. Our native forests are fast disappearing before the woodman's axe; it is only a question of time and supplies will have to be drawn from artificial forests, or from foreign sources. Deciduous trees, such as ash, elm, oak, and beech, should be largely planted. A small quantity of ash grown in Canterbury has already come into use for coachbuilding, and has been pronounced by competent experts to be of excellent quality. Plantations of larch might advantageously be made on the southern slopes of the foot-hills skirting the Canterbury Plains and elsewhere. There can be no doubt that a demand will arise for large quantities of larch-poles for mining purposes, &c. The much-despised *Pinus insignis* has a value far beyond what it gets credit

for. Its timber is admirably adapted for the manufacture of fruit-cases. On fairly good land it will come into use in less than twenty years. It will also be found suitable for making butter-boxes. The wood, if selected and properly dried, is perfectly free from resin of any kind.

A day of retribution will most assuredly overtake this colony for the persistent neglect to plant trees, to compensate in some degree for the wholesale denudation of our native forests. In Canterbury especially the work has been grossly neglected. The Government is, however, taking some steps to remedy the evil, and it is hoped that private enterprise will follow the good example. It is sad to reflect that long before the close of this century there will be a general dearth of timber throughout New Zealand. Our native forests are still being ruthlessly destroyed by the demon fire king, aided by a thoughtless generation. It remains to be seen what will be the climatic effect of the denudation of large areas of forest land. The result in other parts of the world has been to render rainless climates more moist by the extensive planting of trees, while other regions, which have been denuded of their forests, have become comparatively barren wastes for want of sufficient moisture.

The present Government, apparently alive to the importance of this question, has established nurseries in the North and South Islands. The Tapanui State Nursery and Forest is well worth a visit, and the work done by the nurserymen is greatly to their credit. The nursery, some twenty acres in extent, and shortly to be added to and its area doubled, is at the foothills of the Blue Mountains. The whole of the land is tile-drained and in beautiful order, and, with the exception of a small area reserved for growing fodder, all planted out with seedling and yearling trees, mostly hard woods—oak, ash, and walnut—with hard-wood pines. Work in the nursery was only commenced by the State Forester, Mr. H. P. Matthews, in May, 1898, and it is wonderful to notice the amount of labour done in such a short time. There is no "Government stroke" in the State nurseries. The forest to grow the trees when they leave the nurseries is some 850 acres in extent, in the Upper Pomahaka Valley, and already some thousands of trees are growing there most luxuriantly. The forest is also to be a reserve for imported game-birds, but the weasels, stoats, and ferrets with which the country abounds will not allow them to increase. Black games have been turned out already, and other birds are to follow, and the nurserymen are to act as honorary rangers for the Acclimatisation Society.

The necessity for tree-planting on a large scale is pointed out in the following admirable paper from the pen of Mr. T. W. Adams, an authority on such subjects, for the reason that he has been tree-planting on his own estate at Greendale, Canterbury, for more than thirty years. Mr. Adams says :—

The rapid rise in the price of sawn timber is calling the attention of all, even the unthinking, to the desirableness of providing a supply of wood for the

future. A cheap timber will be required in large quantities for packing-cases of various kinds, such as butter-boxes, cases for packing preserved meats, fruit, soap, candles, and a hundred other articles. For such purposes it is likely that no other tree will prove so useful and profitable as the *Pinus insignis*. The *Pinus insignis* is truly a remarkable tree, growing much faster than any other yet introduced to New Zealand, and from experiments that have already been made it seems well suited for making butter-boxes—not, we are told, tainting the butter in the least—and if butter can be carried in boxes made of the wood of the *Pinus insignis* there is no other exportable article that the wood would not be suitable for. A tree grown on Mr. Wason's estate, Rakaia, was sawn into boards, from which, after being thoroughly seasoned, a butter-box was made, and to test the suitability of the wood for the purpose of packing butter for export, the butter was packed in the box by the Central Dairy Factory Company, Christchurch, and stored in a cool chamber for three months. When opened the butter was pronounced by an expert to be of first quality.

The fastest growing and most profitable trees to produce strong, hard-wooded timber suitable for building purposes will likely be found in some of the eucalypts of Australia. For the Canterbury Plains the blue-gum can no longer be recommended, as the frosts have proved too severe to allow of its successful growth, at least in the centre of the plains. Nearer the sea, and, strange to say, in many places on the higher plains, near the hills, the blue-gum escapes without much injury. In most parts of New Zealand for a quick return no trees are more suitable than the two seen everywhere—namely, *Pinus insignis* and *Eucalyptus globulus*. The oak grows well in New Zealand, much faster than in England, but it is so entirely eclipsed in its rate of growth by several of the Australian gums, the wood of which would serve the purpose of the oak in most cases, that I would think it would be more than twice as profitable to grow such gums as *Eucalyptus stewartiana*, *E. coriacea*, *E. gunni*, *E. urnigera*, *E. coccifera*, and *E. amygdalina*, all of which are very hardy, and will bear much more frost than the blue-gum.

Although the English hard-wooded trees, such as the oak, elm, ash, &c., would not prove so profitable as the eucalyptus named, their cultivation should not be neglected, as for special purposes there can be no doubt they will be found very useful, and for scenic effect they far surpass any of the Australian gums.

An oak planted here in the month of June, 1869, is now 4 ft. 3 in. in circumference two feet from the ground, with a beautiful straight bole and a wide-spreading head, and during the past favourable summer would have afforded a safe hiding-place for King Charles I. On the Canterbury Plains, unless under exceptional circumstances, the ash-tree makes very little progress, partly, I think, because its growing season is short, and that during the months when the hot winds are most prevalent. This is to be regretted, as the wood of the ash is better for tool-handles, and many other special purposes, than any of the Australian or New Zealand woods. No doubt in many parts of New Zealand it will grow to perfection, and where it can be successfully grown it should certainly be planted, as there will always be a good demand for the timber by coachbuilders and others, and it does not require to be of a great age before it is fit for cutting into shafts, tool-handles, &c.

The elm grows better than the ash, but as the gums would serve all the purposes for which the wood of the elm is used, and grow so much faster, the gums would certainly be more profitable to plant, although they could never compete with the elm in its stateliness of growth. Every lover of trees should plant a few elms, as their abundant but rather loose foliage adds much beauty to a woodland scene.

If in the future railways are to be built in the same manner as at the present time, the planter would do well when planting to select such trees as are known to be durable when cut up as sleepers. Several New Zealand woods seem suitable for this purpose, and are used in different parts of the colony, but it is questionable whether any of them would be so profitable to plant for this purpose as some of the species that have been introduced from other countries.

It is a common idea that native trees are difficult to propagate and grow, but where the conditions are favourable this is not so, although most of them grow slowly, and in this respect are a great contrast to the Australian trees.

For such purposes as weather-boarding, railway-sleepers, gate-posts, and any other position in contact with the soil, no other tree, in my estimation, is likely to prove so useful and profitable as the Corsican pine (*Pinus laricio*). It grows well in every part of New Zealand; even on the Canterbury Plains, where the conditions are the least favourable, it promises well. An English writer, Mr. A. D. Webster, a gentleman of very wide experience, in his book, "Hardy Coniferous Trees," published recently, says of *Pinus laricio* that he had cut up trees of nearly all ages, up to seventy-one years; the cubic contents of the largest 57 ft.; timber of excellent quality, and well suited for either out or indoor work. It is yellowish-white in colour, very resinous, tough and elastic, easy to work and planes smoothly. He says: "Eleven years ago I instituted a number of experiments with the wood of a tree cut from a specimen, 18 ft. of the butt of which contained 30 ft. of timber, some of the planks being 27 in. wide. For fencing posts, rails, shed-decking, and such like, the timber was used, and with very promising results. In 1894 I examined the timber, and was surprised to find it so sound and well preserved, and in the case of that used indoors it had certainly hardened with age. Unlike the wood of several other species of firs, which get hollowed between the growths, owing to loss of resin and shrinkage, that of the Corsican pine remains perfectly smooth, the beautiful longitudinal dark-yellow resin-containing portions being quite intact after eleven years' wear. The timber does not split readily, but wears uniformly and well when subjected to the almost constant bumping and rough usage consequent on railway travelling, as a large box which has been through many parts of England and Scotland since the Edinbugh Forestry Exhibition bears ample testimony. I consider the timber next to that of the larch for lasting qualities, at least amongst such conifers as have been found of sufficiently rapid growth to warrant their recommendation for forest planting in this country." Other English writers speak of it with equal praise. In New Zealand the tree grows very erect, with very little taper in the trunk, and certainly is the most promising of thirty or more species of pines with which I have experimented, and will grow on the Canterbury Plains more than twice as fast as the larch. It makes but very small side branches, and is altogether a sawmiller's tree, and I have no doubt, from what I have seen of it, that the timber grown here will be of excellent quality. Another advantage it possesses is in having small seeds, so that it can be raised cheaply. It grows to 100 ft. in height; a tree here is now 40 ft., with a beautiful trunk.

A tree closely related to the Corsican pine, and sometimes spoken of as a variety, is the Austrian pine, but in its manner of growth it is very distinct, for while the Corsican is noticeable for its freeness from strong side branches, the Austrian has very stout and strong side branches that will grow in the teeth of a north-wester better than any other pine with which I am acquainted. It will also grow in most unlikely places, standing severe droughts in a remarkable manner, and any one having a piece of shingly ground, unfit for anything else, would do well to try the Austrian pine (*Pinus austrica*). It has two leaves in each sheath, and the cones are a little larger than the Corsican pine. It is somewhat liable to the aphis blight, which is the ruin of the Scotch pine, but it does not succumb to it as the Scotch pine does. No pine is better adapted to form wind-breaks than the Austrian pine. Its wood is very knotty, but for such purposes as posts and other fencing material it will be found very suitable, and if planted thickly, so as to prevent the development of the side growth, would make excellent trees for sawing into timber. It is of a dark shade of green, and the Black Forest is so called, it is said, from the deep green of these trees.

Other pines that so far have shown their adaptability to the conditions on the Canterbury Plains are the large-coned pine (*Pinus coulteri*); *Pinus tuberculata*, another rapid-growing tree here, of a very spreading habit, and with cones that remained closed for many years; *Pinus muricata*, another good shelter tree, looking in its youth like the *Pinus insignis* but never making the same sized trees, the cones (like those of *tuberculata*) remain on many years,

some in Canterbury having cones on them unopened after they have been on the trees twenty-five years. It is said the trees of *Pinus muricata* and *Pinus tuberculata* are of a very different habit in their native localities, and it is accounted for in this manner: the cones never open by the heat of the sun, as most cones do, but remain on the trees until a fire passes through the forest; the cones are then opened, and the seeds drop in large quantities in the ashes, and spring up like grass.

Then commences a struggle for existence, and so they are drawn up without side branches, and are described by American authors as slender trees. *Pinus sabiniana* is a very distinct tree, the foliage (of a striking glaucus or greyish colour) soon drops off, leaving an open tree of no use for shelter, but the tree is one of the best to plant in very dry places. It would succeed where the Austrian pine grows, and would be a great contrast in the colour of its foliage.

As timber trees there are many others that will be found adapted to different localities in New Zealand. Some ten years ago I called attention to the American redwood (*Sequoia sempervirens*) as well suited to the conditions about the hot lakes, and I have been pleased to learn that large quantities have been raised in the Government nurseries at Rotorua. In other parts of New Zealand, in sheltered valleys where there is a sufficient rainfall, there can be no doubt but that *Abies douglassii* will prove a very valuable forest-tree, and experiments should be made with this very rapid-growing beautiful tree in all such places. In England and Scotland it is being very largely planted. *Thuja gigantea* is another tree that gives promise of making a good forest-tree in this country, although it is not adapted to stand the extreme occasional droughts of the Canterbury Plains.

It is pleasant to find that there is an awakened interest being taken in New Zealand in tree-planting. Forestry is eminently a subject for the State to take in hand. This was early recognised by the Governments of Europe, and it is very much to be hoped that our New Zealand Government will take up the matter earnestly. Two or three spasmodic attempts have already been made, but the Forest Department has always been the first to feel the effects of a falling revenue, and the work started has been abandoned.

During the last ten years much has been done in America not only to preserve existing forests but also to plant new ones, and the Department has also in various ways assisted private persons in the planting of trees. Since the 30th March, 1891, when the first forest reserve was made by President Harrison, to the end of 1899 no less than 47,000,000 acres have been reserved for forests in the United States, and the older States are all moving in the direction of giving more attention to tree-planting, New York taking the lead with a College of Forestry. California, Pennsylvania, Minnesota, Michigan, and many other States have taken up the matter in earnest. The Division of Forestry since October, 1898, has been much engaged in assisting private owners of forest lands, in giving them advice on the best way to manage their properties so as to produce the best results, supplying them with working plans, and further supervision.

The Department of Agriculture has also issued bulletins and reprints from the Year-books on subjects connected with the Division of Forestry—Bulletin No. 11, "Some Foreign Trees for the Southern States"; Bulletin No. 17, "Check List of the Forest Trees of the United States, their names and ranges"; Bulletin No. 21, "Two Diseases of the Red Cedar"; Bulletin No. 25, "Notes on the Forest Condition of Porto Rico"; Bulletin No. 26, "Practical Forestry in the Adirondacks"; Bulletin No. 27, "Practical Tree-planting in Operation." All these have been sent to me by members of the Division of Forestry, and have proved of great interest, and it is very much to be desired that the Government of this country will take up the work with like earnestness, as one in every way worthy the attention of the State.

In no part of New Zealand has so much planting been done by private enterprise as in Canterbury, and some public bodies, notably the Selwyn County Council, have done a fair amount in this direction; but, unfortunately, drought and frosts have shown that many of the trees planted are unsuitable for the severe conditions occasionally experienced on the Canterbury Plains. The

planting, of necessity, has been of an experimental character, but now, after fifty years, it may be fairly supposed that we are in possession of an amount of valuable information that would be worth collecting by the State. In planting trees it is particularly desirable that the right kinds for the position they are to occupy should be planted, seeing the crop cannot be changed as an ordinary farm crop can, but will remain for the lifetime of the individual who plants them.

I trust I may not be thought egotistic if I refer briefly to what I have been doing at Greendale during the last thirty-five years in collecting trees, and experimenting with them as to their suitability to the conditions here. I have mentioned an oak that I planted in 1869. About the same time I raised from seed some *Pinus insignis* that are now 90 ft. high, and one I have just measured 4 ft. from the ground is 114 in. in circumference, and I am satisfied, if out up for timber, would prove valuable for many purposes, such as I have previously named. Of the thirty-seven species of pines in my collection, most of them will grow fairly well; two or three suffered from the severe frosts, and about the same number are unable to withstand the droughts; others grow extremely slowly, although quite hardy. Of oaks I have about forty species, most of them very ornamental trees, many of them evergreen, but for economical value it is likely that none will surpass the English oak. In many places an oak plantation might be very economically raised by dropping the acorns thickly in furrows, say, a yard apart, and a row of roots between each, such as mangels or carrots, or even potatoes, might be grown. I know a good plantation that was raised in this manner. In new districts, where the land is not overrun with weeds, mixed plantations of pines, gums, cypresses, &c., may be successfully raised in the same manner by drilling, and at very little cost; in such cases the fencing would be the chief item. Fencing in all cases in making plantations is a very important matter. Thousands of acres of plantations have been ruined through sheep getting among them, say, about January, when the weather was hot and dry, eating the whole of the year's growth, and so damaging the trees that they never again recovered.

To be a successful raiser of trees one requires the same qualities as are required to be successful in other branches of cultivation, and more, as it requires many more years of sticking at it to produce a tree than it does a crop of corn or a crop of roots. In planting trees, too, unless the planter is a young man, he will not plant with the hope of much financial benefit to himself, but will require to take a broader view of life, and plant because he believes that, for the greatest happiness of his successors, it is desirable that they should have the almost indispensable links in the golden chain of their prosperity as cultivators of the soil—Fields, Forests, and Firesides.

On the question of raising plantations of gum-trees, Mr. Adams writes:—

There are a great number of gum-trees known to botanists. Baron Mueller, in his splendid work, "Select Extra Tropical Plants," enumerates over seventy species. Of this large number there are very few that are quite hardy in Canterbury. Those that have resisted the frost best at Greendale are *Eucalyptus coriacea*, *E. coccifera*, *E. gunnii*, *E. stuartiana*, *E. amygdalina*, and *E. urnigera*. These six were but little damaged during the severe winter of 1899. Others about as hardy as the blue-gum were the *Eucalyptus regnans*, *E. macrorrhyncha*, *E. rostrata*, *E. crebra*, and *E. hæmostoma*. The following were all killed by the frosts—namely, *Eucalyptus acmenoides*, *E. botroyoides*, *E. capitallata*, *E. cornuta*, *E. rudis*, *E. corymbosa*, *E. gomphocephala*, *E. homiphloia*, *E. longfolia*, *E. leumannii*, *E. maculata*, *E. megacarpa*, *E. obcodata*, *E. paniculata*, *E. pilularis*, *E. piperita*, *E. punctata*, *E. redunca*, *E. resinfera*, *E. resinfera grandiflora*, *E. robusta*, *E. sideroxoylon*, *E. siderophloia*, *E. sieberiana*, *E. stricta*, and some others. Of those killed some resisted much better than others, and would have passed through the winter most likely had they been nearer the sea.

It may be thought that the long list of those that were killed might very well have been left out, but as much may be learned sometimes from the failures of others as by their success. My object in naming them is to warn intending

planters not to sow those that are not hardy. I should not have sown them, but the seed was sent to me, and I was glad to test them, and to see whether there might not be a few more suitable for planting in Canterbury than we had yet been made acquainted with.

After thirty-five years' experience I have come to the conclusion that persons making plantations in the most favourable situations would do well to limit their selection to the first twelve species named, and generally to the first six species as being more reliable than the others.

The seeds of all the hardy gums are small, and do not generally come up as well as those of the blue-gum, nor do they start with the same vigour the first year. Of the best way to make a new plantation it is very difficult to write. If it is virgin soil broken up from the tussock, and the seed being good, there need not be failure, but after land has been worked and there is sorrel-seed in the ground the difficulties are very great, as the weeds get possession before the trees. In the latter case I have found considerable advantage in giving the gum-seed a start by mixing it in sand made a little damp, say a fortnight before it was sown. This, of course, needs care, as if left a few days too long the seed will be sprouting. Even then I would expect greater success than if sown dry. The land, of course, should be kept worked up to the last day before sowing. The sowing may be done by an ordinary hand-drill, or if the area is large by a grain-drill by closing most of the spouts. Sown in rows about two yards apart a crop of carrots or other roots may be raised between the rows very successfully, particularly if the land has just been once ploughed and 6 in. or 7 in. deep out of grass, well turned over, and only the surface again worked. In sowing the gum-seed it is well to mix a little mustard-seed with it. The mustard-seed must not be mixed with the gums until they are about to be sown. The mustard-seed will quickly spring up, and show the exact row all through the summer.

This is a great advantage in weeding the gums, as for a long time they are very puny, and very likely to get choked by the weeds if left to themselves. Other things besides gums may be sown in this way, as *Cupressus macrocarpa*, or any other of the cypress family. The pines, too, will germinate and come up well; but the small birds are very severe on the pines, often taking the whole lot. The birds do not often interfere with the cypress plants.

In sowing a plantation in this manner it is well to use plenty of seed. No harm will come of their being too many plants; if left it will be a case of the survival of the fittest, or they may very successfully be taken out the following spring to make a new plantation or extend the present one. The best time to sow will be about the 1st October, using about 8 oz. to the acre, and a little Belfast or Islington manure will add to the chances of success. Should it turn out after all that there are not sufficient plants to form a good plantation, the gaps may be very successfully filled with pines the following spring, adding greatly to the beauty and shelter of the plantation.

Of the six hardy gums named above *Eucalyptus stuartiana* is the fastest grower. *E. coriacea* is the hardiest, and I almost think it grows slower than either of the others. *E. gunnii* makes very rapid growth at first, but is not so remarkable for its growth after the first two years. It is almost as hardy as *E. coriacea*. One striking characteristic of gum-trees is the extraordinary difference of the foliage in both shape and colour of young and old trees. Most people have noticed this in the blue-gum, and it applies to all, or nearly all, of the others, except perhaps *E. risdonii* and *E. gumophylla*, which always retain their early form of leaf.

Of the uses of the wood of the different species of gums there is not much need to speak, but I will add Baron Mueller's remarks on the species here recommended. Of *E. amygdalina*, he says it is a tree of the largest size. A tree was measured in the Cape Otway Ranges 415 ft. high and 15 ft. in diameter. The wood is easily split, well adapted for shingles, rails, staves, inner building material, and many other purposes, but it is not a strong wood. Of *E. gunnii* he says it attains a considerable size, and supplies a strong useful timber. *E. coriacea* is used for ordinary building and fencing purposes, and for quickly producing fuel is one of the best of trees. Of *E. stuartiana* he says the wood is mostly used for fencing and for fuel, and is of considerable strength. Nothing is

said of the merit of the wood of *E. coccifera* or *E. urnigera*, but a friend of mine cut down a large tree of the last species a few years ago, and found it of great value as fuel, almost equalling coal in its heat-producing qualities. In Canterbury *E. urnigera* grows into a fine tree, and is more dense in its foliage than any other I have noticed. In closing, I may add that the different species of gums may be raised in boxes, and planted out as other trees are, but they require sowing very late in the summer, say, 1st December, or otherwise they will be too large to transplant successfully.

Prospects of Small Farmers.

Those who have watched the course of events in other countries, so far as they affect the agricultural interests of New Zealand, have come to the conclusion that New Zealand will have to pay greater attention to the quality of her agricultural exports than has been given to them in the past. Our farmers cannot hope to compete with such countries as Australia and South America, where land is so much cheaper, and where mutton and beef of good quality can be produced; for cheap meat these must command the markets of the world. Happily for New Zealand, our climate and pastures are such that we can not only produce mutton equal to the finest English or Scotch, but we can produce more per acre than can be done in Australia. Our dairy-produce is now second to none, which is largely due to the system of manufacture.

Owing to her humid climate and fertile soil New Zealand is peculiarly well adapted for small holdings. Men of slender means can easily make homes for themselves and their families, always provided they know something of the work they undertake, and are, with their families, willing to work hard and live frugally for a few years. It is quite possible for a man with a few cows and pigs, together with poultry and bees, to make a good living, as markets for these products are now being opened up in England and there is a good local market if the goods are properly prepared. There is also a continuous demand for the supply of coastal and ocean-going steamers. The facilities now given for obtaining land and money at reasonable rates offer great inducements to persons to settle upon the land. This is amply illustrated at Cheviot, where a fine estate has been cut up into moderate-sized farms, and let to farmers on perpetual lease at a rental representing 4 per cent. on the purchase-money. Prosperous homes are springing up all over the settlement. Its success will be assured when the proposed line is completed, connecting the settlement by rail with the local markets and the port of shipment. There are thousands of acres in the North Island adapted for farming, and much land there is being taken up.

SECTION III.

ROTORUA DISTRICT.

[For full details respecting the thermal springs and Sanatorium at Rotorua, see Dr. Ginders's article in the Year-book, 1899, also published as a separate pamphlet. The analysis and action of the mineral waters, properties of various bath springs, with medical information as to cases suitable for treatment, will be found therein.]

Rotorua Town..

Rotorua Town is situated on the southern shores of the lake of that name, at an elevation of 915 ft. above the sea. The climate is bracing, without being too cold. It is accessible by rail from Auckland or the Thames, by coach from Tauranga and Napier, by rail and coach from Wellington *viâ* Hunterville and Toka-anu, or by river-steamer from Wanganui to Pipiriki and on by coach *viâ* Wai-o-uru, Toka-anu, and Taupo. There is a post and telegraph and money-order office. The streets and the best hotels and houses are lighted by electricity, the power developed being also used for pumping the sewage to a distance. The accommodation at the hotels and boardinghouses is excellent. The Government Sanatorium is a large building standing in its own grounds. It is well fitted with all requirements, and is in charge of a Resident Medical Officer.

Baths.

The principal baths are at Rotorua. The "Blue Bath" is a hot swimming-bath, fitted up with commodious dressing-rooms, cold showers, and hot douches; its water is of a saline nature. There is also a sulphur and vapour bath in connection with the swimming-bath. The "Cornwall Bath," built for the Duke and Duchess of Cornwall and York, is a highly finished and luxuriously fitted bathroom, supplied from the Rachel Pool. The "Priest's Bath" is in the main pavilion on the edge of the lake; its waters are acid and aluminous, and its temperature 98° to 106° Fahr. There are large public bath-houses — two for ladies and two for gentlemen — and private baths for special cases, with dressing-rooms, hot douches, and cold showers. In the same building is the "Rachel Bath," the water of which is alkaline-siliceous, its temperature being 194° Fahr. It consists of large public baths for each sex, with private baths for special cases, and dressing-room accommodation and showers. The new "Ladies' Swimming-bath" is a well-appointed and large bath attached to the pavilion, its water being of the same quality as that of the "Blue Bath." The "Postmaster

Bath" is on the edge of the lake, but some distance from the other baths which are in the Sanatorium grounds. It is a hot bath, its waters being acid and supplementary to those of the "Priest's Bath" in their indications. It consists of six large public baths—three for men and three for women—with dressing- and waiting-rooms, cold showers, and hot douches. In addition to the baths mentioned, and not far from them, are such well-known ones as "Cameron's," "Painkiller," "Coffee-pot," "Stonewall Jackson," "Corlett's," "Saddler's," "The Gemini," and "Vaux" baths. All these are curative, and are not yet closed in. At Whaka-rewarewa, about 2 miles from the Sanatorium, the two principal baths are the "Oil Bath" and the "Spout Bath," both of which are hot and exceedingly good, being quite as efficient medicinally as any of the others.

The Sanatorium gardens and grounds at Rotorua are nicely laid out and planted, the native shrubs being preserved and tastefully trimmed so as to give shade and resting-places.

Objects of Interest.

Visitors to Rotorua can within a day make any of the following excursions by way of varying the usual monotony of sleeping, eating, and bathing, and having something else to talk of and listen to than "symptoms":—

Ohine-mutu and Whaka-rewarewa.

In the morning walk or ride to Ohine-mutu, the old Native village, where there are many hot springs and Natives, the Anglican Mission Church, and the Native meeting-house. On the way to Ohine-mutu, going by way of the lake, the Roman Catholic Church is passed. In the Native Pa there are many boiling pools and baths, and a considerable Maori population, whose ways and manner of life form an interesting study. From Pukeroa Hill, which is a recreation reserve overlooking Ohine-mutu, several excellent views of the old and new townships of Rotorua may be obtained. In the afternoon Whaka-rewarewa may be visited, where there are geysers and another Native village and some healing-baths. At both Ohine-mutu and Whaka-rewarewa the habits of the Natives and their method of cooking by steam form amusing subjects of observation. Coaches run between Rotorua and Whaka-rewarewa every forty-five minutes.

Hamurana and Tikitere.

Another enjoyable excursion for the day is to take to the water, and in one of the steam-launches visit the cold springs of Hamurana, situate on the northern shores of Lake Rotorua, then across to the Ngae on the eastern shore, where by arrangement one can be met by a coach or buggy and driven to Tikitere. A stay *en route* may be made at the Island of Mokoia. From Tikitere the drive back to Rotorua is about 12 miles. Instead of doing this in one day and merely skimming over it, several enjoyable trips may be made out of

it. The visitor may steam over to Hamurana, where he can get canoes and paddle up the river to the springs, then have lunch on the beach or river-side, eat as many cherries as he may, if in season, and generally enjoy the scenery, returning to Rotorua by launch in time for dinner; or he may land on Mokoia, famed for its scenery and its story of Hinemoa and Tu-tane-kai, and spend a pleasant day there, returning in the afternoon. Another day's outing may be had by driving to Tikitere the whole way from Rotorua, seeing its wonders, horrors, and beauties; then visiting the Blue Lake near there, and returning by road in the afternoon. The last-mentioned trip is a favourite one, for the route is by the new road from Rotorua to the Rotoiti Lakes, Tikitere being reached in about two hours and a half. To quote from a writer in Bond's Almanac, Tikitere is "in form a valley filled with solfataras, mud-volcanoes, and boiling springs in a condition of fierce activity. In the centre are two boiling lakes, and the narrow strip of ground separating them is known as the 'Gates of Hades.' There are many interesting narrows of a like kind, and on the south side there is a valuable healing-spring." The hydro-thermal action is so great that the ground all round is in a continual tremble, making one half inclined to leave such dismal horrors far behind him. But this feeling soon wears off, and invalids, even ladies, live here for weeks in order to benefit by the valuable mud and other baths, which have effected so many cures. About half a mile north of the springs immense quantities of sulphur are dug by the Natives, and sent to Auckland for commercial purposes. Close by is the Blue Lake before referred to—a lovely piece of scenery—whilst a short climb up a small hill will reward the tourist by a view of Lake Rotoiti and surrounding country. The surrounding hills are still covered with erupted mud, now dry, but furrowed into many sharp crevices and gullies.

Te Wairoa and Tarawera.

An interesting excursion may be made to the site of the old village of Wairoa, which was destroyed by the eruption of Mount Tarawera in June, 1886. Arrangements can be made for crossing Lake Tarawera in boats, and ascending the mountain, when a good idea can be obtained of the immense forces that were at work on that occasion, and the awful experiences of those Europeans and Natives in its vicinity on that memorable night. Wairoa, nine miles from Rotorua, can be reached by coach, the road having been reopened for wheel traffic since its destruction by the eruption. To do this trip in one day an early start must be made. Leaving Rotorua the traveller soon meets with the effect of the eruption—dry mud everywhere. Tikitapu, though sadly disfigured, is still a beautiful piece of bush. Tikitapu Lake is 1,435 ft. above sea-level. Here Nature has done her best to cover her ugly work; hill and bush showing little of the mud that maimed the giant trees and crushed the scrub and fern. But, alas! the colour of the lake, once so lovely, is gone. Its milky water is, however, not unpleasant to

the eye nor yet to the palate, and mixes fairly well with good whisky. Old travellers will miss the former exquisite beauty of the lake, but a ride along its shores on a pleasant day is a treat even now. Separated by a narrow neck of land from Tikitapu is Lake Rotokakahi, the next place of interest, 1,350 ft. above sea-level, a sombre-looking piece of water. Being near to Wairoa, it suffered severely from the eruption. A Native settlement on its southern shore was abandoned after the eruption. Here begins the Wairoa Creek, the outlet of the Rotokakahi Lake, and leading to Wairoa. At Wairoa are the ruins of an old mill, the tops of Native whares, remains of hotels and houses. The only surviving portions of a once pretty village are the trees, which seem to thrive in spite of their desolate surroundings. Fruit abounds in season. Tarawera Lake, 1,032 ft. above sea-level, is most melancholy in appearance. A sail across this lake is a welcome change, the boats being good. The traveller is landed at the foot of the Tarawera Mountain. Peak Ruawahia, being 3,770 ft. above sea-level, compels an awful and painful interest. The lower part is easy of ascent, and the upper not difficult for active men; visitors may without much fatigue obtain a comprehensive view of this field of destruction. No verbal description can possibly convey an adequate idea of this scene of devastation and desolation. After lunch it is necessary to start on the journey home, in order to get there in time for dinner.

Wai-o-tapu Valley.

This valley is about 22 miles from Rotorua on the road to Galatea. The springs there are many, and calmly beautiful compared with Tikitere.

The road goes through the Hemo Gorge, passes the deep blue of the Puarenga. It is monotonous enough, through a valley which apparently at one time was a totara forest, dead logs of that timber being strewn all over the country. The land belongs to the Natives at present. A ride of ten miles brings you to Pa-karaka, a Native settlement, from which a good view can be obtained of Mount Tarawera. Here a track leads to an old pa and an old Constabulary barrack at Kaiteriria, beautifully situated on the shore of Lake Rotokakahi, but abandoned by Natives after the eruption. Earthquake Flat—so called from the numerous cracks which are the result of earthquakes—is 12½ miles.

Following the old road to Rotomahana, the site of the Pink and White Terraces, the top of the hill, Pareheru, is soon reached, and looking towards the north-east Tarawera, with its enormous chasm and desolation, lies before you. At your feet the great geyser of Waimangu sends its column of mud, water, and steam right up into the clouds, forming, indeed, a cloud of its own. Eastward and southward stands Mount Kakaramea as a sentinel at the entrance of the strange region, far to the east the Kaingaroa Plains, and beyond the Urewera (Tuhoe) country. Descending to the main road, a pleasing

surprise awaits the visitor, for Mount Kakaramea stands in front—a most striking object, its sides covered with many-coloured earths, with puffs of white steam issuing here and there. Beautifully contrasting is the cool colour of Lake Ngahewa lying at its base. Soon the hotel at Wai-o-tapu is reached, where the traveller can lunch and visit the sights, and return to Rotorua. If, however, he has time, he had better stay the night and thoroughly explore the district.

Rotowhero–Wai-rakei Road.

The road from the Galatea–Wai-o-tapu–Rotorua junction at Rotowhero to Wai-rakei is passable for any kind of wheel traffic, passing mostly through pumice country, and is dry and hard. The latter portion from the Waikato River to Wai-rakei is completed, and there is a bridge crossing the Waikato River.

This road is an interesting one for sightseers. From Wai-o-tapu right along to the Waikato River, hot steam-holes and springs are to be found on the way. Then the mighty Waikato River rolls past. At Ohaki there is a spring, which for size and beauty is remarkable, besides other smaller ones. A divergence should be made to see the Aratiatia Rapids. On the drive to Wai-rakei a continuous view of Nga-uruhoe and Ruapehu, with the Te Mari Crater steaming its straight column into the sky, is obtained. From the saddle above Atiahaka there is a grand view of Lake Taupo and the mountains on a clear day.

From Wai-rakei the tourist should obtain horses and visit Orakei-korako, about 12 miles away. This spot, after Wai-rakei, is really the finest in the district; the Alum Cave alone is worth while going a long way to see.

The following are the sights on the drive from Rotorua to Wai-rakei: Wai-o-tapu Springs, 2 miles from junction, or 19 miles from Rotorua; Waikato River, 13 miles from junction; Ohaki Springs, 2½ miles from river; Orakei-korako Springs and Alum Caves, 12 miles by track from river; Aratiatia Rapids, 17½ miles from river, or 3 miles from Wai-rakei; Orakei-korako, 12 miles by track from Wai-rakei; Nga-uruhoe–Ruapehu and Tongariro Range, most of the way from Waikato to Wai-rakei; Lake Taupo and Mountains, from Atiahaka Saddle; Wai-rakei Geysers, 1 mile from Wai-rakei, or 17½ miles from river.

The country is all open, except a little bush on the right hand from the junction to the river, above the Paeroa Settlement. On the north side of the Waikato River it is well watered, but on the south along the road only two small streams are passed. Generally the land is poor, mostly flat, occupied by Maoris here and there. The largest pa is at Ohaki, sometimes as many as a hundred Maoris being congregated there; the majority of the pas, however, range from thirty to fifty souls. Altogether there are about ten kaingas

on the road from the Rotowhero Lake to Wai-rakei. At Wai-o-tapu there is a hotel, and at Wai-rakei a comfortable hostelry.

The geyser valley at Wai-rakei is really the most remarkable of all the sights of the volcanic belt.

A good way of making the trip is for travellers to come to Wai-o-tapu from Rotorua, see the sights there, and stay the night. Next day drive on to the river and Ohaki, then on to Aratiatia Rapids; and thence to Wai-rakei, staying the second night there, and seeing the sights in the Geyser Valley, then to Orakei-korako another day. Orakei-korako can also be reached on horseback from Atiamuri or from Earthquake Flat, both distant about 10 miles, the latter by following the telegraph-lines; or on horseback from Ohaki, distance 12 miles, thus affording a choice of four routes. The Wairakei–Atiamuri route is the best, and travellers will find it very interesting; to those fond of shooting there are pheasants, ducks, and pigeons to afford sport.

The Lakes: Rotoiti, Rotoehu, Rotoma.

An excursion lasting from one day to a week, or even more, according to the inclination of the traveller, can be made to the lakes from Rotorua. The tourist goes by launch to Tapuae-haruru, a Native village at the eastern end of Lake Rotoiti, where arrangements can be made for staying under canvas for any length of time, and from whence excursions may be made to the other lakes, and the Hot Spring of Waitangi, between Lakes Rotoehu and Rotoma. The scenery along the shores of these lakes is extremely fine, and the only way to get any idea of it is to go and see it. The road recently constructed from Rotorua goes past Tikitere, and along the shores of Rotoiti to Tapuae-haruru, and on to Te Teko and Whakatane. It leads through the bush, following the course of the old Native track along the shores of Lake Rotoehu, past cherry groves and hot springs, to Lake Rotoma, so that the beauties of this district may be visited either by water or road. By a horse-track through the bush, leaving Lake Rotoiti at Te Ruato, a Native village, Lake Okataina can be reached in an hour's time. On Lake Rotorua pleasure-boats can be obtained, sailing or rowing; also tents and all necessary gear for camping.

ROTORUA TO TIRAU AND OKOROIRE.

If the visitor is tired of steam-holes, porridge-pots, geysers, and sulphur, and yearns to get the sulphury fumes from his nostrils and the uncanny sights from his mind, a drive to Tirau or Okoroire is the one thing needful to restore his faculties to their normal condition. Certainly at Okoroire one meets with hot springs and other thermal action, but they are small compared to those of Rotorua.

Leaving Rotorua, the coach travels on a good road along the western or prettiest side of Rotorua Lake, passing on the left Ngongo-taha Mountain, from whose summit a grand view may be

obtained of the Bay of Plenty, including Mayor Island, Tauranga Harbour, Motiti, White Island, and Cape Runaway, together with other objects of interest and note.

Tarukenga is 9 miles from Rotorua, its chief attractions being a Native pa on the high ground. Here the visitor by rail from Auckland catches the first glimpse of the lakes, looking from an altitude of 1,000 ft. or 2,000 ft. above sea-level.

In the bush which is entered just beyond, nothing is more enjoyable on a fine day than a drive through its ever-changing hues of green, brown, and yellow. The prevailing trees are rimu, tawa, rata, and some totara and hinau, the mountain rimu especially recommending itself for building purposes.

Getting clear of the bush, the traveller soon comes in sight of cultivation, and reaches the Thames Valley, in which are situated Tirau and Okoroire. On the right is seen Matamata, the Te Aroha Ranges, and the Kaimai, on the left the valley of the Waikato, with the hills beyond. Still continuing the journey, the Wai-makariri River is crossed, where there is a trout-hatchery established. Two miles further on the hotel is reached and the journey for the day is completed.

A few miles from Tirau, in the Matamata direction, is the Okoroire Sanatorium and health resort, where many tourists break their journey to or from Auckland. It has many features of interest similar to Rotorua, but on a much smaller scale, although each place has some particular charm all its own. The hotel is built on rising ground on the banks of the Waihou River, and the building commands a wide range of landscape.

Spacious and convenient bath-houses have been erected, connected by a covered way with the river, where visitors may enjoy the luxury of a cold plunge after a warm bath. In their respective seasons, shooting and fishing engage the attention of the tourist, and good bags in both branches of sport are generally obtained. The railway-station is about 5 miles from the Sanatorium, whither coaches convey visitors free of charge to the hotel door.

TE AROHA THERMAL SPRINGS.

Te Aroha is one of the most favourite health resorts in New Zealand. It is very prettily situated on the Waihou (Thames) River, thirty-three miles southward from the Thames, and within easy reach of Auckland by rail. The township takes its name from the adjoining mountain, which rises to a height of over 3,000 ft., and contains numerous valleys and gullies filled with a great variety of tree-ferns and other forms of luxuriant vegetation. The climate is equable, dry, and salubrious. The accommodation for visitors is very good, and the natural attractiveness of the place has been largely added to by improvements carried out by the local authorities.

There are eighteen springs in the township under the control of a Domain Board; fifteen of the springs are hot or tepid. Seven large bath-houses have been comfortably fitted up; there is also a large building, containing a number of private single baths, and a summer-house, with fountain, providing the mineral water for internal use. The waters are, with the exception of the sulphur springs, saline and feebly alkaline, and strongly charged with carbonic-acid gas, which is constantly escaping from the springs in large quantities, rendering them effervescent and pleasant. These springs are very similar to those of Vichy (France), Ems (Germany), and Bilin (near Teplitz, Bohemia), and are quite equal to them in strength. Potash exists in all these waters, but only in very small quantity. Baths Nos. 1 to 15 inclusive, and No. 18, are colourless, with the exceptions of Nos. 4, 13, and 14, which are pale-yellow. No. 16 is turbid, owing to the presence of precipitated sulphur.

Bath No. 1, pleasantly situated up the hill, is set apart for ladies, and is much used.

Bath No. 2 is of large size, with waiting- and dressing-rooms attached. A short distance from it is a reservoir of hot water, containing 20,000 gallons. Three-fourths of the water from the springs supplying it is at a temperature of 90°, and the temperature of the rest from certain springs ranges up to 119°.

No. 3 bath-house is divided into private rooms, with a bath in each, fitted with hot- and cold-water valves to regulate the temperature as desired, and each provided with a shower.

Nos. 4, 5, and 6 are extensively patronised, and good bathing-houses are erected over the springs.

No. 15 spring is largely used for drinking, and, according to Dr. Alfred Wright, the late physician to the Thermal Springs Domain (from whose handbook on Te Aroha some of the particulars here given have been taken), its water is a valuable adjunct to the treatment of certain forms of dyspepsia and kidney affections. No. 8 is also a drinking spring, but of lower temperature. No. 16 (cold) has little overflow. Sulphur is found in small quantities in the surrounding clay, and there is emitted a strong sulphurretted-hydrogen gas. No. 17, also a cold spring, is used for application in cases of eye affections. No. 18 is a cold soda-water spring.

In order to meet the demand which has sprung up for a potable supply of Te Aroha mineral water for drinking elsewhere than at the fountain, the Government permitted the granting of sole rights for a term of years to a company formed for the purpose of working and distributing the mineral waters, and the Te Aroha Soda and Mineral Water Company (Limited) had a large exhibit of these waters in the New Zealand Court at the Melbourne Centennial Exhibition of 1888.

ANALYSIS OF EIGHTEEN MINERAL WATERS FROM TE AROHA.—No. 4423.

Alkaline Waters 1 to 15, 17, and 18.

No.	Temp. in Deg. Fahr.	Chloride of Sodium.	Chloride of Potassium.	Sulphate of Soda.	Carbonate of Lime.	Carbonate of Magnesia.	Bicarbonate of Soda.	Silica.	Total Grains per Gallon.
1	102	60·25	1·72	38·32	10·77	6·86	461·56	7·56	587·04
2	112	60·45	1·90	32·67	7·12	4·21	426·29	7·12	539·76
3	112	60·51	} with the sodium chloride {	32·82	7·24	4·20	429·19	7·21	541·17
4	92	34·24		19·16	4·62	2·14	246·49	5·17	311·82
5	100	68·77		36·92	6·91	3·15	476·58	6·10	598·43
6	104	66·23		35·14	7·12	2·99	499·75	7·14	618·37
7	86	67·13		34·04	7·46	4·34	444·20	7·01	564·18
8	109	66·14	1·96	32·91	7·47	4·21	451·97	8·60	573·26
9	112	41·29	..	22·16	4·94	2·61	301·17	6·44	378·61
10	96	35·24	..	19·19	4·67	2·31	276·19	6·00	343·60
11	88	34·69	..	20·12	5·11	2·56	261·44	6·11	330·03
12	88	41·66	..	22·96	5·12	2·99	300·97	7·11	380·81
13	120	40·67	..	21·86	6·11	3·13	301·64	6·86	380·27
14	122	42·61	..	23·16	7·14	3·49	321·64	6·66	404·70
15	139	43·11	..	22·16	6·91	3·61	331·76	7·05	414·60
17	..	2·71	..	3·92	0·64	0·27	9·36	4·21	21·11
18	..	16·12	..	8·16	1·97	1·01	131·72	13·14	172·12

Nos. 1, 2, 8, 9, 10, 11, 12, 13, 14, 15, and 18 contain traces of alumina and iron-oxide.

Nos. 3, 4, 5, 6, and 7 contain traces of alumina, iron-oxide, and potassium.

No. 17 contains 1·4 gr. of sulphuretted hydrogen.

Important additions and improvements have been carried out. A bath-house, 98 ft. long by 28 ft., with a centre corridor 8 ft. wide, laid with tile paving, and twenty-three rooms off it, nineteen of which are furnished with the best porcelain baths, has been completed, and was opened on the 24th May, 1898, by the Hon. A. J. Cadman, then Minister for Railways and Mines. To provide proper drainage and carry off all the water from the baths a pipe has been laid on from the Waihou River. Two concrete reservoirs, containing respectively 6,000 gallons and 20,000 gallons of hot water, have been laid down, and both are connected with pipes and valves. A large concrete swimming-bath, 40 ft. by 20 ft., and 3 ft. 9 in. to 5 ft. in depth, has been made at a convenient point to receive the overflows from these reservoirs. These and other additions were carried out at a cost of £3,860. After the completion of the railway to the Thames there was a large influx of visitors, and this caused a heavy drain on the supply of hot mineral water available for the baths. In order to obviate any possibility of a shortage, the Board decided to drive a prospecting tunnel, and the Government granted a subsidy of £150 towards this work. There is now every indication of an ample supply being available, several good springs having been

tapped in transit, some registering 120°. This additional supply will enable the Board to fill the above hot-water swimming-bath, which has not been used because there was not enough hot water from overflows. A lawn-tennis ground has been provided, and a bowling-green will probably be added as soon as the funds of the Board permit. The growing popularity of Te Aroha may be gathered from the amounts received for baths during nine years:—

	£		£
1890	366	1895	421
1891	411	1896	603
1892	427	1897	729
1893	466	1898	769
1894	406		

Te Aroha is 115 miles by rail from Auckland, thirteen miles from Paeroa, and thirty-three miles from the Thames. Coaches leave Paeroa frequently for the important goldfields of Karangahake, Waihi, and Waitekauri, so that these districts are also placed within easy reach of the healing waters. It is customary for many of the miners and residents on these goldfields to go to Te Aroha on Saturday and return on Monday morning; cheap return fares are provided by the Railway Department with the view of encouraging this branch of the passenger traffic. It may therefore be surmised that the increase in the Domain Board's revenue which has taken place since the railway was opened to Paeroa and the Thames will go on steadily augmenting year by year.

HANMER THERMAL SPRINGS.

Among the many pleasure and health resorts in the Middle Island of New Zealand the Hanmer Thermal Springs District is justly very popular. As a health-recruiting ground, pure and simple, it undoubtedly holds the first place. There are various reasons for this preference for Hanmer. It is situated beyond the Leslie Hills in the Nelson District, nearly a hundred miles from the hurry and bustle of a large city, and twenty-four miles from a railway-station. The healing natural waters are, of course, the great attraction. Their fame has gone abroad, and year by year brings an ever-increasing number of visitors. The climate must also be credited with its fair share of the attractiveness of the district. Although situated in latitude 42° 30′ S., the heat, even in midsummer, is not oppressive. The height of the springs above the sea-level, 1,220 ft., and the distance from the coast, thirty-two miles, insures a dry heat during the day, with cool mornings and evenings. The air is bracing and salubrious, and allows feats of walking and hill-climbing to be performed with less fatigue than on the lower levels and in the more humid atmosphere near the coast.

Besides attracting the physically weak and the mere seeker after pleasure, Hanmer is yearly growing in favour with the fagged brain-

worker, the nerve-worn man of affairs, and the mechanic who "needs a spell." To them Hanmer is a veritable Elysium, where business is not thought of. The world with its distracting cares and life-shortening ways is shut out.

Journey to Hanmer.

To get to Hanmer the train is taken from Christchurch to Culverden, the northern terminus at present of the Hurunui–Bluff railway system, a distance of sixty-nine miles. Leaving Christchurch at 7.35 a.m., Culverden is reached at 12.10 p.m. The railway runs through some of the most fertile country in the Middle Island. Along the route are the Townships of Kaiapoi, Rangiora, Amberley, and Waikari.

Culverden is the centre of the fine pastoral country which extends to the neighbourhood of Blenheim. At its yards the largest sheep sale in New Zealand took place in March of 1898, when 250,000 sheep were brought under the hammer. Having lunched here, the passenger transfers himself and baggage to the coach, and the remaining portion of the journey is performed in three hours and a half. The coach route runs through the picturesque valley of the Waiau. The road winds in and out among the hills until crossing the river by a fine iron bridge the plains are unexpectedly reached. This level plateau, which stands at an altitude of 1,220 ft., is about ten miles long by four miles broad, and is surrounded on all sides by mountains, some of which rise over 5,000 ft. high. About the middle of the plains are the hot springs. These are of an alkaline and saline character, with a strong escape of sulphuretted hydrogen, and they possess undoubted curative properties for certain diseases.

Accommodation, etc., at the Springs.

The springs are situated in an area of 13 acres, enclosed by live fences and trees, and laid out in pleasant walks and lawns, bordered by flowers, all neatly kept. A croquet-lawn, tennis-court, and bowling-green have also been laid down. The hotel-accommodation for visitors is ample. The Government Sanatorium contains twenty-two bedrooms, two dining-rooms, smoking-rooms, drawing-room, sitting-room, doctor's consulting-room, &c. It is capable of accommodating about thirty persons—viz., fourteen in the first-class compartments and sixteen in the second-class rooms. The Sanatorium is chiefly used by patients whose complaints require them to live near the baths, and is, in fact, a good hotel, with separate rooms for first- and second-class guests.

"The Lodge" is a commodious two-story house within a few chains of the bathing-grounds. The Jollie's Pass Hotel (licensed) is situated two miles and a half from the baths, and was originally built by the Government as an accommodation-house for travellers crossing the Pass, the great highway between Nelson and Canterbury. Mrs. Lahmert has a Temperance Hotel near the springs, and there are several other boarding-houses.

During the 1900–1901 season 2,115 people visited the springs, taking 17,964 baths.

The bath-houses contain in all twenty-two private baths, with massage-rooms and Turkish baths supplied with hot and cold mineral-water. The water is brought in pipes from the adjacent springs. The temperature ranges from 86° to 97° Fahr., and may be increased at will to 114°. Besides the private baths there are a ladies' swimming-pool and a gentlemen's swimming-pool, both surrounded by high iron fences and covered by awnings. The average depth is 5 ft. The temperature of the pools is 85° Fahr., and is so comfortable that, once in, the bather hardly cares to come out again. The charge for the private baths is 1s. each or 8s. for twelve, while for the pool 6d. a bath is the price. Situated in the grounds is a pump-room used by patients drinking the waters which give relief in stomach, liver, and kidney troubles. The water is warm, and contains chloride of sodium and sulphurous acid, and many testify to its beneficial effect.

An arrangement of pipes enables the gases to be inhaled by the patient, and this, like the drinking of the waters, gives relief in cases of asthma and bronchial affections. Sufferers from these complaints find that the clear atmosphere of this upland valley has a wonderfully curative effect.

A comfortable reading-room has been provided in connection with the baths, on the tables of which may be found works descriptive of the scenery, resources, and history of New Zealand, also a few of the best monthlies, &c.

Natural gas is used to light and heat the baths, and to light, heat, and cook with, at the sanatorium.

A post- and telegraph-office supplies facilities for communicating with the outside world.

Masseuse Available.

In premises fitted up for her use, Miss Edith Cook, certificated masseuse, practises her art. She has great experience, and those who have been under her hands testify to her skill as a manipulator. In fact, it has come to be recognised that the bathing and the massage treatment go hand-in-hand towards effecting cures in cases of muscular ailments.

Medical Attendance Procurable.

Dr. Little, of Culverden, visits the springs once a week during the season, and his services are at the disposal of the visitors at moderate fees. If urgently required he can be communicated with by telephone at any moment.

Tourist Season, etc.

The tourist season extends from the 1st November to the 1st May, and during those months coaches from Culverden to Hanmer

run daily up and down. During the rest of the year coaches only run on Tuesday and Saturday from Culverden, and from Hanmer on Monday and Thursday. The baths are open throughout the year; but the massage treatment can only be obtained during the summer months. The Government Sanatorium and the hotels and boarding-houses, of course, provide accommodation all the year round.

Apart from the cost of getting there—the railway issue through return first-class tickets from Christchurch for £1 10s., and from Dunedin, £4 2s. 6d.—Hanmer, unlike many other pleasure resorts, is not an expensive place to stay at. There are no "extras," in the shape of boating and driving excursions, as in the cold lakes district, and no guide-fees, as in the alpine district. The only way one can make extra expense is to indulge in a superfluity of baths, and that is hardly likely.

To those capable of Alpine work there are Mount Perceval (5,335 ft.) and Mount Captain (6,600 ft.). On a clear day, from either of these peaks, the Port Hills, Lake Ellesmere, and the long sweep of the Canterbury Plains to the ocean, can be seen. Jollie's Pass to the Saddle affords a fair morning's walk, so also does Jack's Pass, and there are many other short excursions which may be made by those whom the baths have restored to vigour.

There is good fishing in the Clarence, the Waiau, the Hanmer, and their tributary streams; while for dog and gun there is such game as hares, rabbits, wild ducks, and swamp-hens.

The analysis of water taken from No. 1 Spring at Hanmer Plains, made at the Colonial Museum in 1891, gave these results:—

Chloride of sodium	62·09
Chloride of potassium	0·15
Chloride of lithium	Trace
Iodide of magnesium	Trace
Carbonate of lime	0·55
Carbonate of magnesia	1·77
Carbonate of iron	0·05
Sulphate of soda	7·48
Carbonate of soda	2·66
Phosphate of alumina	Trace
Silica	2·63
Total grains per gallon ...	77·38
Gas—Sulphuretted hydrogen	2·19

An analysis made thirteen years ago, prior to the earthquake which occurred in 1888, by Professor Bickerton, of Christchurch, is interesting from the fact that it includes an examination of the sediment and organic matter contained in the water. The sample

was taken from Spring No. 8 before it was incorporated with No. 1. It is as follows:—

Sediment—Silica and free sulphur ...		1·400
Nitrogen as free ammonia ...	0·092	
" as albuminoid ammonia	0·048	
" as nitric acid	0·047	
Total nitrogen ...	———	0·187
Sulphuretted hydrogen, free ...		3·430
Sulphate of lime	9·940	
" potash	1·960	
" soda	0·400	
Bicarbonate "	7·770	
Chloride "	56·230	
Bicarbonate of magnesia ...	0·640	
Total fixed matter ...	———	76·940
Total grains per gallon ...		81·957

The total amounts of fixed salts in the two analyses correspond very closely. The sulphates and carbonates in either case are so small that the fact of their varying in the two analyses is a matter of no importance. The fact of the discovery of traces of iodine and lithium in the recent analysis is interesting.

Directions for using the Baths at Hanmer Sanatorium.

[By Charles T. W. Little, M.B., Ch.B., Visiting Medical Officer.]

The temperature of the Hanmer Baths can be regulated from cold up to 114° Fahr. Patients are cautioned against using the baths at first at too high a temperature, and against remaining too long in them. The caretaker in charge will be glad to give information on this point. A cold shower is provided with each bath. Invalids and those unaccustomed to the shower must use it with caution. After leaving the bath, patients should cool gradually, and be careful to avoid exposure to cold.

The water of the springs is laxative and diuretic, and may at first nauseate. It should be drunk in moderation, not more than one or two glasses daily for a commencement.

During their stay at Hanmer, visitors are recommended to freely take exercise in proportion to their strength. The Sanatorium affords facilities for this. The walk from the accommodation-houses to the springs will benefit those in fair health. Those suffering from feeble circulation, and those convalescent from acute diseases, must be specially careful with regard to the temperature and the duration of their bath, and should first ask information from the caretaker.

Patients suffering from bronchial catarrh will find inhalation of the steam beneficial, but must carefully avoid cold after leaving the bath. For local affections of a chronic rheumatic nature, &c., patients will find the hot douche useful, but must persist in its use. Massage both during and after the bath is here very useful.

Experience has shown that the benefit derived in skin affections varies much with individual cases. Dry and scaly skin affections generally benefit by prolonged immersion. Irritable and moist skin affections, on the other hand, benefit more by a short immersion. Should such affections be aggravated by the treatment, the baths should be discontinued for a time at least.

The benefit derived by gouty patients has been found to vary with the case. Patients suffering from derangements of the alimentary system (constipation, torpid liver, &c.), asthma, whooping-cough, nervous debility, and insomnia have testified to receiving benefit from a stay at Hanmer.

Giddiness, bleeding from the nose, chilliness, nervous depression, increased irritability of the skin, are indications either that the baths do not suit, or that they have been too freely used, and should be discontinued for a day or two at least. Visitors to the Sanatorium finding no appreciable benefit from the first few baths have often discontinued them altogether. Provided that the treatment is not aggravating the complaint, such action does not give the springs a fair trial. In chronic affections a long course of treatment is often required, and the immediate benefit is not seen.

THE MARLBOROUGH SOUNDS.

(From a paper by C. W. ADAMS, Esq.)

THE Marlborough sounds, which can be reached almost at any time in a few hours from Wellington, are, nevertheless, not so well known as the world-famed sounds on the west coast of the South Island, which can only be visited by a special and expensive excursion conducted by the Union Steamship Company once a year. The characteristics of the scenery are, however, essentially different. While the natural features of the thirteen wonderful sounds on the West Coast are as grand as can be found in any part of the world, the shores are precipitous, and in consequence these places are not inhabited. The shores of the Marlborough sounds, on the other hand, although generally steep, are well adapted for the grazing of sheep, and the whole of the land, with the exception of a few scenic reserves, has been taken up, almost every little bay having its clearing and its homestead. To many tourists this human element forms an advantage, as fishing and boating excursions may be planned, with the certainty of being able to procure food and shelter in case of need from the settlers.

The boats of the Union Company leave Wellington several times a week for Picton and Nelson. Picton is the chief port of call in the sounds, and is connected with Blenheim, the capital of Marlborough, by a railway eighteen miles long. The steamer usually leaves Wellington at noon, and makes the run across Cook Strait to Picton, a distance of sixty miles, in four or five hours. Besides the run down Wellington Harbour to the heads, the last twenty miles

of this distance is smooth water, as the steamer enters the narrow heads of Tory Channel when forty miles from Wellington Wharf. On entering Tory Channel the vessel is in a haven of refuge, and the passengers can admire the scenery at their ease.

Tory Channel is ten miles long, and leads into Queen Charlotte Sound. The main entrance of this sound is eight miles wide between Cape Koamoru and Cape Jackson, and is separated from Tory Channel by what appears to be the mainland, but is really Arapawa Island.

There is a peculiarity in the tides here. With a rising tide the current flows in at Tory Heads and out towards the entrance of Queen Charlotte Sound, thus flowing partly round Arapawa Island. With a falling tide the current runs in the reverse direction. After entering Tory Channel the old whaling-station of Te Awaiti is seen on the right hand. This was a busy place in the whaling days, but not of late years.

Settlers in the sounds have to depend chiefly on water communication, whether they wish to visit each other or take their produce to Picton or Havelock. But the observant traveller will notice on either hand as he sails up Tory Channel bridle-tracks or footpaths evenly cut out of the hillside. These tracks are only a few feet wide, but are a great convenience to the settlers when the weather is too rough for them to use their boats. The tracks creep along the steep sidelings, rising or falling in regular grades, so regular in places that they appear from some points of view as if ruled with a ruler along the hillsides. There are over a hundred miles of these tracks in the sounds, and they are constantly being extended.

Queen Charlotte Sound is thirty miles long, Picton being twenty-six miles from the mouth. Pelorus Sound is thirty-four miles long following the course of its main channel. Of its numerous branches Kenepuru Sound is the longest, extending to fourteen miles. Some idea of the labyrinthine windings of these sounds may be gained from the fact that the shore-lines of Queen Charlotte Sound and Tory Channel make a total of two hundred miles. Similarly, Pelorus Sound, with its various branches, has a shore-line of three hundred miles. The far-famed Milford Sound, on the West Coast, is only eight miles long.

There are over twenty post-offices in the sounds, of which three are in Tory Channel, four in Queen Charlotte Sound, and sixteen in Pelorus Sound, with its numerous branches. It takes about two hours for the steamer to reach Picton after entering Tory Channel. Picton is not a large place, but is picturesquely situated at the head of Waitohi Bay, and is embosomed in hills. There are several excellent hotels and a good reading-room.

After passengers for Picton (and Blenheim) are landed here the steamer leaves for Nelson, the passage lasting eight or nine hours. Going to Nelson the steamer does not turn into Tory Channel, but

PICTON.

keeps straight down Queen Charlotte Sound to the sea. The scene is always changing, headlands and bays being passed in rapid succession, with picturesque islands here and there. After passing the deep bay to the left, called Endeavour Inlet, Resolution Bay is opened up, and then Ship Cove. This last was the favourite anchorage of Captain Cook, and there has been wisely reserved an area of 2,000 acres surrounding this cove. This scenic reserve is entirely covered with forest, is well watered, and is a favourite camping-ground for tourists.

Both Queen Charlotte Sound and Tory Channel are indented on either side with many deep bays, there being over twenty of a large size, without counting smaller ones. Blumine Island, Pickersgill Island, Long Island, and Motuara Island all lie within the entrance of Queen Charlotte Sound, and good fishing can be had in various places. The numerous bays indenting the north side of Arapawa Island are favourite camping-places for tourists.

The entrance to Pelorus Sound is about twenty miles from that of Queen Charlotte Sound, and the French Pass is twelve or thirteen miles further on, but there is no regular steamer communication between the two sounds. There is, however, direct communication once a fortnight between Wellington and Havelock (at the head of the Pelorus Sound). The steamer "Te Kapu" leaves Wellington every alternate Wednesday at 3 p.m., carrying mails for the various post-offices in Pelorus Sound; but the time of her arrival at Havelock is irregular, on account of the tides, as steamers cannot reach the wharf there except at high water. The time-table trip for the boat leaving Wellington at 3 p.m. on the 18th December, 1901, might be taken as a specimen. The run across Cook Strait takes seven or eight hours, and, rounding Alligator Head, the boat arrives at Hikoekoea Post-office (Titirangi Bay) at 11 p.m., and at Te Puru, at the entrance of Anakoa Bay, at 1 a.m. on the 19th December; then steams through Guard's Pass, between the mainland and Forsyth Island, arriving at Ketu Bay at 3 a.m., which is the first place of call that is within Pelorus Sound. From Ketu Bay the vessel proceeds up Pelorus Sound and through the Apua Channel, between Maud Island and the shore, and on to Elaine Bay, at the end of Tawhitinui Reach, where she arrives at 5 a.m.

There is a narrow neck of land between Elaine Bay and the head of the Croixelles Harbour about half a mile in width, and there is a similar neck, called Onahau Neck, dividing the waters of Queen Charlotte Sound from Kenepuru Sound. It is a dream of some sanguine spirits that in the near future these two necks of land will be pierced by a ship-tunnel, in which case, with a specially constructed steamer built after the shape of a torpedo, the voyage from Picton to Nelson will be shortened nearly one-third, and will be made for the most part in smooth water.

Leaving Elaine Bay, the steamer arrives at Brightlands, on the southern shore of Tawhitinui Reach, at 6 a.m., proceeding eastwards

for five miles, takes a sharp turn round Tawero Point, and then steers straight for Marie's Bay. Leaving Marie's Bay at 7 a.m., she sails up Popoure Reach, arriving at Maori Bay, about nine miles further up the sound, at 9 a.m. Leaving Maori Bay, and getting once more into the main sound, Hikapu Reach is opened, extending about six miles to Black Point, passing the mouth of Kenepuru Sound, which extends a distance of fourteen miles to the eastward. From Black Point it is just six miles to Havelock, which is situated between the mouths of Pelorus and Kaituna Rivers, at the head of the sound. As the steamer has to observe the tides at Havelock Wharf, she is not due there till 3 p.m. on the 19th December.

Havelock is a small township twenty-eight miles from Blenheim, on the main coach-road from Blenheim to Nelson. There is daily communication between Blenheim and Havelock by coach. At the head of the navigation of the Pelorus River is one of the largest sawmills in New Zealand.

The steamer-fares are very moderate—viz., Wellington to Havelock, 15s.; return, £1 5s.

So much for the steamer routes; but there are other ways of visiting the sounds. A small harbour steamer runs down Queen Charlotte Sound from Picton every Monday morning, calling at Endeavour Inlet and Resolution Bay, and returning the same evening. On Wednesday and Saturday mornings it runs up to the Grove Wharf, at the head of Queen Charlotte Sound, a distance of seven miles; then back again down the sound to Torea Neck, nine miles; returning across the sound to Picton, another six miles, by noon—a run of twenty-two miles for the sum of 4s. Another trip is made to the Grove on Wednesday and Saturday afternoons. On Thursdays the harbour steamer carries the mails down to Te Awaiti, near the entrance of Tory Channel, calling also at Onapua and Te Weka, both going and returning.

These little harbour trips can be made with a very small expenditure of time and money; and those fond of fishing can proceed in the steamer till they come to a favourable fishing-ground, their boat being towed behind. The steamer will leave them at any desired spot and call for them on the return trip, after a few hours.

A very pleasant trip can be made by leaving Picton, say, on Wednesday at 8.30 a.m. in the harbour steamer, calling at the Grove at 9.30, and landing at Torea Neck at 11, walking over Torea Neck (a distance of about a mile) to the Kenepuru Post-office and Accommodation-house, where a hasty lunch is taken, and passage in the oil-launch "Ina" across Kenepuru Sound, a distance of about three miles. For ordinary rowing-boats there is a little boat-channel, which was cut in 1882, through the Kaiaho Neck. This channel silted up in the following year, and was not cleared out again till the middle of 1898, when wing-walls were built to prevent the shingle from being washed in again. Landing at Waitaria Bay, the tourist has a walk of six miles before he reaches Maniaroa, unless

HAVELOCK.

he has previously arranged for the Maniaroa mailman to meet him with a horse.

The view from Maniaroa Saddle, 1,000 ft. high, looking back over Kenepuru Sound, Torea Neck, and Waitohi Valley, beyond Picton, is very beautiful, a grand background to the picture being made by the majestic Tapuaenuku towering up in the far distance. The view the other way, looking over Pelorus Sound, is also very pleasing. Accommodation can be had at Maniaroa; also boat and horse (by arranging with the mailman).

If boating or fishing is decided on, a trip southward into Crail Bay may be made, or northward into Beatrix Bay. Beatrix Bay is separated from Forsyth Bay by the narrow Piripaua Neck, which connects the large peninsula called "Kenny's Isle" with the mainland. Measured horizontally at high-water level the distance across is only 145 ft., but this narrow ridge was originally 80 ft. above high-water mark. During 1899 this ridge was cut down halfway, or 40 ft. vertically, and will be lowered still more in the future, to allow boats to be hauled across. The saving in distance by this short portage for a boat going from Anakoa Bay to Havelock amounts to six miles, or to Maniaroa nine miles; while the entire circuit of the peninsula by a boat measures no less than eighteen miles.

If horse exercise is preferred the bridle-track may be followed towards the west and south to Hopai Bay and Crail Bay. From the head of Crail Bay a track leads south over a saddle to the Kenepuru Sound, or north over a higher saddle, from whence the track branches northwards to Marie's Bay or southwards to Ynoyca Bay. The return journey is made on Saturday in company with the mailman, picking up the harbour steamer at Torea Neck, and reaching Picton at noon.

An extensive riding tour may be made from Picton by proceeding to the Grove Wharf by land or water, then following the coach-road three miles to Mahakipawa, then taking the bridle-track over a saddle and down to the shore of Mahau Sound. The track then follows the shore of this sound and Kenepuru Sound in an easterly direction, passing Kenepuru Post-office and Accommodation-house on the way. The distances are approximately as follows: From the coach-road (Grove to Havelock) about sixteen miles to the Kenepuru Accommodation-house; then eight miles to head of Kenepuru Sound, and seven miles to Waitaria Bay; then six over Maniaroa Saddle to Maniaroa Bay, and twelve to head of Beatrix Bay; and then eight to the head of Anakoa Bay, and seven miles further to the head of Titirangi Bay: making a total distance of over sixty miles. In this distance of sixty miles twenty-three homesteads are passed, which will give a good idea of the average distance between the homes of the settlers.

From the head of Kenepuru Sound there is a bridle-track over a saddle into Endeavour Inlet, a distance of about six miles. From Picton also a bridle-track now extends as far as Oyster Bay,

on the south side of Tory Channel. A full day's ride can also be had by going from Picton to Port Underwood, over a high saddle, thence southerly along the shores of Port Underwood to White's Bay cable-station, and from thence to Blenheim. There is also about ten miles of bridle-track on Arapawa Island. From Havelock also there is a bridle-track crossing the Pelorus River, and extending down the western shores of Pelorus Sound as far as the head of Nydia Bay, a distance of over thirty miles.

The tracks generally are very narrow and tortuous, sometimes not more than 2 ft. wide, cut out of the solid rock, and oftentimes dangerous to travel unless with a quiet and surefooted horse. Under these circumstances speed is out of the question; but, if the traveller is not pressed for time, and can saunter along at his leisure, he will find this a most delightful way of spending a holiday, especially if he is in search of the picturesque. Lovely and everchanging views of the sounds come into sight at every turn.

The beautiful Tennyson Inlet extends five or six miles southerly from the western end of Tawhitinui Reach. This inlet can also be reached by a bridle-track leaving the Nelson–Havelock Road at a point in the Rai Valley. This track extends about twelve miles up the Opouri branch of the Rai River, then crosses a saddle 1,600 ft. high, and then drops down for four miles to the head of Harvey Bay.

Tennyson Inlet has three picturesque islands near its entrance, and it is so land-locked that the visitor may well imagine he is on a large lake, as from the head of the inlet there is no sign of an opening towards the sea.

As regards the characteristics of the two main sounds, the land surrounding them consists almost entirely of steep hills. It is only in a few places that there are limited areas of flat land at the head of some of the bays.

The culminating peak of the great peninsula that separates the two sounds is Mount Stokes, 3,951 ft. high, visible from Picton Wharf. From the summit of this mountain can be seen a most extended panorama. To the north a large part of the North Island is in full view, including Mounts Egmont and Ruapehu; and to the south the view extends over the sounds and Picton to the great backbone ridge of the South Island.

The climb to the top of Mount Stokes is a very rough one. There is no clear track through the forest that clothes the sides of the mountain, but in spite of this ladies have often made the ascent. The best and easiest route at present is from the head of Kenepuru Sound on the south, although it has been ascended from Maniaroa on the west, Anakoa Bay on the north, and Endeavour Inlet on the east.

There is much more open land to be seen in Queen Charlotte Sound and Tory Channel than in the Pelorus Sound. The latter is

at present the most picturesque, but the axe and fire of the settlers are rapidly denuding the hills of their lovely forest covering.

Mighty are axe and fire, destroyers twain,
Swift servants of the arch-destroyer, Man;
And he is mighty as he hews amain,
Bronzed pioneer of nations. But to scan
The ruined wonder never wrought again,
The ravaged beauty God alone could plan,
Forces the thought, Is this the price we pay—
The price for progress—beauty swept away?

—*The Passing of the Forest.*

THE OTAGO LAKES.

[By JAMES RICHARDSON.]

OTAGO has been termed "the Switzerland of Australasia," and not without reason; but the title does not fully convey an idea of the diversity of the scenic attractions presented to the tourist within the provincial boundaries.

The magnificence of Milford Sound dwarfs into insignificance the celebrated fiords of Norway. Majestic as are the Swiss Alps, no such panorama can there be viewed as is unfolded before the spectator standing on the Lake Harris Saddle or the summit of Mount Earnslaw. In picturesque combination of mountain, waterfall, forest, and lake, Otago may be said to equal, if not eclipse, the famous Yellowstone Park of America.

LAKES.

Of the numerous lakes embraced within the district no two are alike, each possessing special scenic charms of its own. The largest are: Te Anau, area 132 square miles; Wakatipu, area 114 square miles; Wanaka, area 75 square miles; Manapouri, area 50 square miles; and Hawea, area 48 square miles. Easy access to all of these is now provided by rail and coach, and locally facilities are offered for inspecting the many minor lakes and other points of interest surrounding the major inland waters.

LAKE WAKATIPU.

Lake Wakatipu is situated in the heart of the district, at an altitude of 1,069 ft. above sea-level, and may be reached by rail from Dunedin (187 miles) or from the Bluff (104 miles). It is fifty-four miles in length, with a breadth varying from one mile to three miles and a half, and an ascertained depth of about 1,300 ft., the bottom being thus about 230 ft. below the level of the ocean. The water is of the darkest blue in colour, nearly chemically pure, and the temperature a few feet below the surface varies from 50° to 52° Fahr.

It was of Wakatipu that Anthony Trollope wrote as follows: "I do not know that lake scenery can be finer. The whole district is, or rather will be in the days to come, a country known for its mag-

nificent scenery." The Rev. W. S. Green, of Alpine Club fame, in recording his attempts to ascend Mount Earnslaw, is even more eulogistic. "Lake Wakatipu," writes Mr. Green, "is amazingly beautiful; the only lake in Europe which can surpass it is Lucerne."

Arrived by rail at Kingston, at the foot of the lake, the tourist takes the steamer to Queenstown, distant twenty-five miles, where the excellence of the hotel accommodation will prove an agreeable surprise to the visitor from abroad. A few days may be pleasantly spent in doing Ben Lomond and driving round the mining districts of Arrowtown and Skipper's; but the finest scenery is at the head of the lake, and the tourist should not fail to go to Glenorchy by steamer (thirty miles), and thence make excursions to the Lake Harris Saddle, Rere Lake, Paradise, and the valleys of the Rees and Dart Rivers. A magnificent series of glaciers may be seen up the Dart Valley. Alpine climbers will include in the programme an ascent of Mount Earnslaw, 9,165 ft., which presents no difficulties; and, if inclined to conquer new peaks, may essay Mount Cosmos, 8,000 ft., which should be attacked from the rear, *viâ* Lake Harris. Horses and guides may be obtained at either of the hotels. Visitors who like camping out should not miss the opportunity of exploring the magnificent valley of the Hollyford River, going *viâ* the Lake Harris Saddle and returning *viâ* the Greenstone track. At Pyke's River, just below Lake Alabaster, the camping-ground is in full view of Tutoko, 9,042 ft.

Lakes Wanaka and Hawea.

The coach-road to Wanaka (forty-six miles from Queenstown) goes over the Crown Range, from which a magnificent panoramic view of Central Otago is obtainable. A comfortable hotel will be found at Pembroke, on the shore of Lake Wanaka, and excursions to the many points of interest may be made by steamer or on horseback. Wanaka possesses a unique attraction in the shape of a lake within a lake. On the top of Manuka Island, nearly 500 ft. above the surface of Wanaka, is a wonderful little lakelet, surrounded by rocks and shrubbery. Where the water comes from or where it goes to are unsolved mysteries. To obtain a view of Mount Aspiring (9,960 ft.) the Matterhorn of the Antipodes, the tourist should ride up the valley of the Matukituki River, an excursion which will be found extremely interesting.

Hawea is close to Wanaka. It is a beautiful lake, about twenty-nine miles long by an average breadth of three miles, but not so well known as it should be owing to the absence of any accommodation; but in the near future its deer-forests and magnificent trout-fishing cannot fail to attract sportsmen from all over the world.

From Pembroke the tourist has a choice of three routes. He can either retrace his steps *viâ* Queenstown, and, leaving the train

MOUNT TUTOKO.

at Lumsden, visit Te Anau, Manapouri, and Milford Sound, or, in summer-time, go by coach to Mount Cook; or, lastly, journey to Dunedin by coach and rail through the goldfields.

Lake Te Anau.

Te Anau, which lies at an elevation of 694 ft. above sea-level, has an ascertained depth of 1,350 ft., and is about forty miles long, is the largest of the Otago lakes, and is now easily reached either from Milford Sound by a well-made foot-track, or from Dunedin and the Bluff by rail to Mossburn, and thence by coach. There is a capital hotel at Te Anau, and a fine steamer goes at regular times up the lake with a mail; by means of this tourists may also explore the beautiful fiords which run back from ten to eighteen miles into the heart of mountains. A comfortable boardinghouse will also be found at Te Anau Township, and at the head of the lake good accommodation at Glade House, a newly erected Hermitage on the Clinton River.

As Te Anau has a coast-line of two hundred and fifty miles, it will be readily understood that weeks might be spent in exploring its magnificent scenery. Although the mountains are not so high as those surrounding Wakatipu, there is no lack of ruggedness, their summits varying from 5,000 ft. to 6,000 ft. in height. For the most part the shores are forest-clad, a feature which adds much to the attractiveness of Te Anau, and distinguishes it from its better known rival. Behind the fine peaks of the Murchison and Kepler Ranges lie George and Bligh Sounds. A track from the middle arm of Te Anau to George Sound, touching, *en route*, Lakes Hankinson, Thompson, and Mackinnon, is being made. As the crow flies the distance from the lake to George Sound is only about eight miles. An artist's opinion of the scenery of Te Anau has found expression in the following graceful specimen of word-painting: "For twenty miles after passing the South Fiord all is wondrous beauty of hill and mountain, valley, and ravine, many-tinted foliage, and many-hued cliffs. Under the noonday sun the whole mass of foliage becomes illumined. The silver birch becomes a brighter green, the broad-leaf a deeper olive; the scarlet rata-flower becomes more brilliant, and the crimson mistletoe more vivid. The few dead trees appear no longer bare and lifeless; but, covered with moss and long pendulous lichen, seem transformed into luxuriant clusters of whitest bloom, as if nature willed that in this land of living green the hand of death should never be visible."

The Clinton Valley and Milford Sound.

Now that a track has been completed and shelter-huts erected at convenient points, an excursion from Lake Te Anau to Milford Sound may be made without difficulty, given moderate walking powers; in fact, several ladies have accomplished the journey. A start is made from the accommodation-house, which has been erected on the Clinton, near the head of the lake, and a guide may be retained to act as pilot and packman. The route lies through the magnificent

scenery of the Clinton Valley, and thence over the Mackinnon Saddle and down to the Arthur River on the other side.

The Sutherland Falls.

These falls, discovered by Mr. Sutherland, of Milford Sound, and said to be the highest in the world (1,904 ft.), are situated about a mile and a half from the Beech Hut (fourteen miles from the Sound), and a good track to them has been cleared.

Milford Sound.

The majestic beauty of Milford Sound—the finest fiord in the world—is so widely known that any description of it here is unnecessary. Although the discovery of Mackinnon's Pass has rendered it accessible from the land side, tourists wishing to see it usually take advantage of the admirably conducted excursions of the Union Steam Ship Company, which are annually patronised by travellers from all over the world. The steamer trip lasts ten days, and other beautiful sounds are visited, time being allowed for sketching, fishing, or ferning.

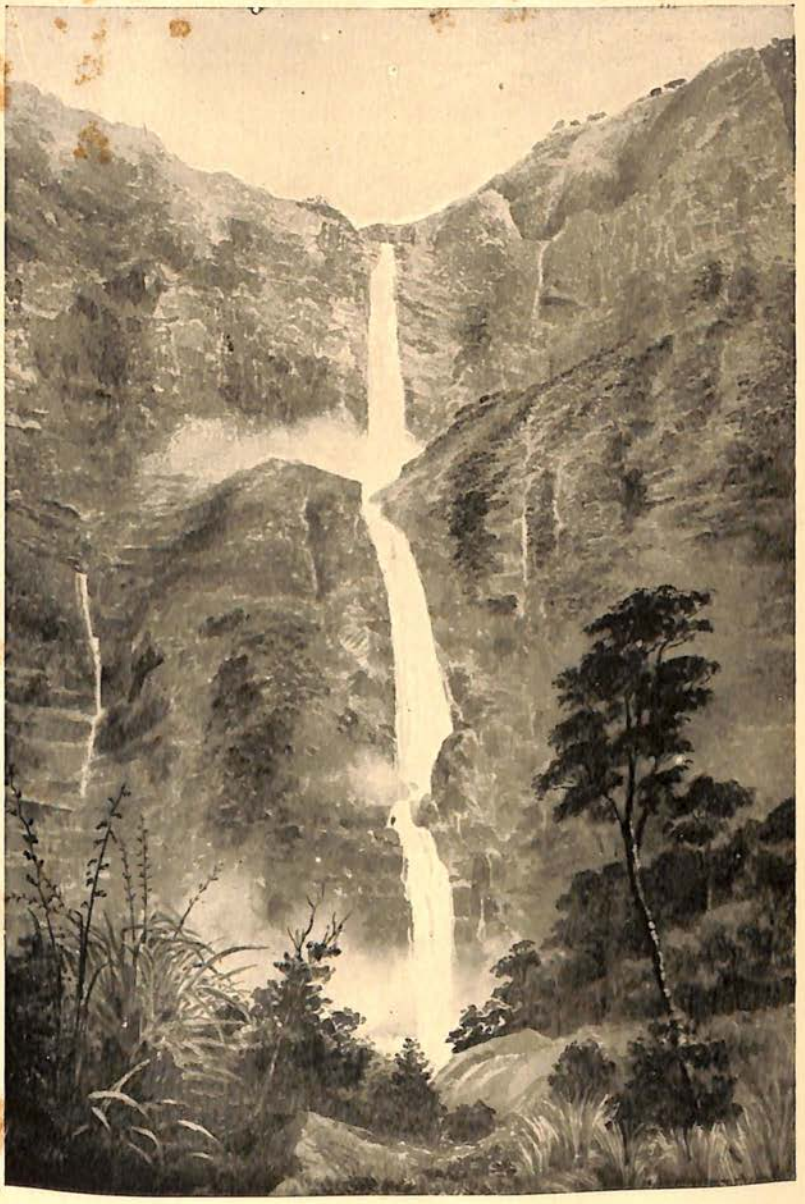
Lake Manapouri.

This, the most lovely of all the larger lakes, lies about twelve miles south from Te Anau. On the drive a picturesque panorama of the Waiau Basin is presented at Horse-shoe Bend, where the track touches the river. A good accommodation-house has been erected near the outfloor of the Waiau, and a steamer plies on the lake.

Its extraordinarily irregular coast-line and wooded islands lend to Manapouri a special charm. Delightful surprises meet the eye at every turn, the splendid spires of Cathedral Peaks and the wooded Hunter Mountains alternately forming an imposing background. Little bays, with pretty sparkling granite beaches, are found nestled under overhanging foliage and embrasured between rugged cliffs, on which the trees can scarcely find foothold. Now vision is limited to wooded knolls and rocky buttresses; now is spread out a vast expanse of liquid mirror, reflecting the snow-clad Cathedral Peaks and exquisitely beautiful islets. At every point the scene changes, but every transition is enchanting. From the head of the lake a practicable route to Dusky Sound has been discovered; but until a track has been made the journey should not be attempted except under the direction of a competent guide.

Visitors to Manapouri should not fail to camp out for a night on Pomona Island, or the Isthmus at Monument Arm. At the northern end of the lake, near the inflow of the Waiau River, are remains which demonstrate the presence there, at no very distant date, of a tribe of Maoris of which the Natives on the Coast can give no account.

Although at present approached *vid* Te Anau, or from Mossburn by coach direct, it can also be reached from Invercargill by taking train to Otautau, and driving the rest of the way. When the Mara-



SUTHERLAND FALLS, MILFORD SOUND.

roa River has been bridged near its confluence with the Waiau, the journey from Invercargill will be easily accomplished in one day.

To the west of the Waiau River, the outlet for Te Anau and Manapouri, are three other lakes but little known to tourists—viz., Wooded Monowai, which may be reached on horseback from Sunnyside Station, on the Waiau, in about three hours; Hauroto, a larger lake, surrounded by very fine mountain and forest scenery, is reached from Clifden, fifteen miles on horseback or by vehicle, and twelve miles on foot through a bush track; and Poteriteri, at present only explored by surveyors and prospectors. The Twin Mavoras—small but exquisitely beautiful lakes—will be included in the programme of every tourist doing the round of the cold lakes as soon as the road now being formed between Wakatipu and Te Anau is completed.

Shooting and Fishing.

Nearly all the lakes and rivers of Otago are now stocked with brown trout, which attain a size unknown in the Old Country; the largest yet caught scaled 28 lb. The license-fee is £1, the open season lasting from the 1st October to the 15th April.

Native game—wild duck, pigeons, &c.—are plentiful in parts, and may be shot without fee.

Of the imported game, wild swan are to be found in thousands on the larger lagoons near the coast, hares are numerous in the northern districts, and Californian quail have done well in several districts.

The red-deer in the forests on the Morven Hills (Lake Hawea) afford magnificent sport; but sportsmen who cannot spare the time to travel so far inland will find the Blue Mountains, near Tapanui (107 miles from Dunedin by train), amply stocked with fallow-deer. The license-fee is £3 3s., and the season extends from the 15th March to the 15th May (autumn).

THE SYDNEY PAGEANT. — TAMAHAU MAHUPUKU'S ACCOUNT.

(*New Zealand Times*, 22nd January, 1901.)

On Saturday afternoon last Tamahau Mahupuku, the head chief of the Wairarapa tribes, entertained an interested group of pressmen with a recountal of his experiences at the Sydney Commonwealth pageant, which he attended as a representative of the Maoris, accompanied by Nireaha Tamaki and Ratana Ngahina. Tamahau is a fine specimen of the Maori; opulent, yet generous, noble in appearance as in disposition, the father of his tribe, and the lover of his race. He is, in fact, the typical native gentleman, standing out on all great occasions, commanding, picturesque, dignified, self-contained. When seen by the pressmen on Saturday Tamahau was "at mine ease at mine inn"—the Wellington

Hotel. He was in undress uniform, surmounted with a khaki coat. He preferred to speak through an interpreter—Mr. Tare Parata.

As a preliminary to his narrative, Tamahau wished it to be made known how much he appreciated the *entente cordiale* which existed between the Maoris and the Europeans throughout the colony. There had been differences and misunderstandings in the past, but the future would draw them together, cement them eternally as one people. "For your prosperity is our prosperity; your Queen is our Queen; and your God is our God!"—a fine sentiment, admirably expressed.

Then he spoke of the longing which for years had possessed him to view with his own eyes the great continent of Australia, of which he had heard so much. Like many other voyagers, over his experiences of the Tasman Sea he preferred to draw a veil. "The sea was very angry," he volunteered, "and a strange feeling came over us, but all on the 'Mokoia' were very kind, and when we left the shores of Niu Tireni and entered into the Pacific Ocean there the waves were peaceful: it was as level as the surface of glass." Sighting Port Jackson within three days, they sailed into Sydney Harbour, where lay a fleet—being the most wonderful collection of shipping which Mahupuku had ever seen. Accommodation being scarce the Government placed the "Tutanekai" at the disposal of the chiefs, "so that we could always enjoy the breezes of the sea to cool us in that hot country. I must tell you that when I got there all the sickness which I had felt during the voyage disappeared, my body became most peaceful; no troubles to disturb my inner parts, and I felt I was a new man.

"Then I began to look round. I seemed like one in a mist. Night came on, and it seemed as if the stars of Heaven had been brought down and placed upon the house-tops, and on the masts of ships, and in the streets. The whole firmament was ablaze with fire, and lights twinkled in all the waters. Our Maori traditions say that it was the stars of Heaven which guided our forefathers across the waters from a far country to this land. In Sydney I found stars brought from Heaven to guide the footsteps of the coming nation. I said to myself, 'These people are second gods.' In the streets I saw great houses made of rocks towering up into the sky. I saw the tramways—they had no horses. One was something like a train, and was drawn by an engine. Another had hands which grasped a wire, and was drawn along. I never saw the wire, but was told it was in the earth. Third was conveyed by a small wire hung up, and another wire was thrust up from the car and the two were married, and the car moved. This tram was a wonderful tram. It was the fastest of all—faster than our trains. I said to myself, I have seen wonderful things to-day.

"On the 1st January, the great day of that demonstration, I beheld thousands and thousands—yes, a great multitude of people of all kinds, races, and denominations. We were taken up to the

housetops on a building containing, I think, four floors. We saw the great procession down below. There were the Imperial troops and the Indian troops. Both appeared so stately in their magnificent robes, their swords glittering like diamonds. It was indeed a great spectacle. We sat gazing in astonishment from 10 in the morning until 4 o'clock in the afternoon. Then the next thing was at the monster pillar where that great and illustrious child the Commonwealth was baptised. The people massed in thousands round that monument, and I was astonished to see the order of those who were present, and the capable management, there being no crushing and no disorder whatever during the whole of that sacred ceremony.

"Then, next night we were taken on board the 'Mokoia' into the harbour, and were made witnesses of the fires lit by the Europeans. I saw wonderful sights. Thunders seemed to appear at the hands of the white people; the lightnings flashed as from Heaven. In fact, that fire display was of great splendour and magnificence."

Mahupuku then went on to explain how he was introduced to Lord Hopetoun, to whom he extended an invitation on behalf of the Maori people to accompany the Queen's grandson to New Zealand. Afterwards he went to Botany Bay. "There we saw some of the Mungomungos or what you would call the Maoris or the aboriginals of Australia. There were about thirty in all. I and my companions approached very close to them so that we might see the make and form of these people, their physique, and also their fighting weapons. I saw that these people seemed to be a hardy race, but as to their faces I was unable to judge, and they were all covered by some kind of paint, and I could not see what they were like. I saw that their eyes were set far back into their sockets, and their eyebrows projected and almost made a shade. Their bodies were covered with hair, and I witnessed that their fighting weapons were very dangerous. I may say that I had my *taiaha* in my hand at the time. The Europeans all wanted to feel and see what it was like; and although the weapons of the Mungomungo were of various kinds, and numerous, the pakeha said the Maori weapon—the *taiaha* I had—was more picturesque with its carvings and mountings than those of the natives of that place. Also the greenstone symbols of Maori chieftainship were much admired by the people of that country, and the *pikihuia* (plumes of the huia) which decorated our hats also proved interesting. Then a demonstration took place representing the landing of Captain Cook and the hostility of the aboriginals. All these sights which we have seen have impressed the whole of our minds and bodies of the vastness of that country and its inhabitants. This is printed in our hearts permanently—*ake tonu atu*—for ever and ever."

Tamahau summed up his impressions as follows: First, astonishment at the vastness of the great city built on the side of the harbour; second, its fine and imposing buildings; third, the astonishing fact of three different lines of tramways running in the

same streets, amid all the other traffic, and apparently without inconvenience or accident.

"No accidents. Yes, one! I saw with my own eyes an old man who fell just in front of a tram, then, like a flash, a scoop was let down and the man was shovelled up and gently thrown on one side. The tram passed on, and the old man got up and shook the dust off him and walked away unharmed. I say this is a great people. I was so amazed I stood there and looked at the old man. I was amazed. I had no words to say. I could not speak, and then I walked away astonished."

Mahupuku then went on to describe the wonders of Sydney Harbour: the deep waters close in shore, the trees sprouting luxuriously from the huge rocks, the presence of trees and shrubs which he had always thought indigenous to New Zealand and which made him think of home, the surprising greenness of the vegetable gardens in such a hot climate when similar weather here would have parched everything.

As to the hospitality of the New South Wales Government and the people of the country, "it will live for ever in our hearts, and we will implant it in the hearts of our children, and advise them to hand it down to posterity." Tamahau desired also to thank the Premier and Native Minister of this colony, who were most kind to them during the whole trip. "It is my desire," he said in conclusion, "that some of the young educated Maoris should travel more into other countries, to benefit their minds and to learn the progress of those countries. This trip opened my eyes to such an extent that it took me two nights to shut them after leaving that great place. I tried to sleep, but my eyes would not let me. I kept seeing all those wonderful things. When I return to my home in the Wairarapa, it is my intention to call a great meeting of Maoris from different parts to recite to them the sights that I have described to you, that they may hand them down to their people; and it may be the means of advancing the Maori people. But no matter where I may go, what sights I may see, and what things I may be brought into contact with, there is no place to me like New Zealand. Long may you representatives of the Press live. God guard over you all, and guide you to higher, loftier works.

"What I have just given you are my impressions—the things that have hit me in the head—while I was over at that great land."

And with these impressive words, the interview ended.

RELIGION OF THE ANCIENT MAORI.

[ELSDON BEST.]

THE religion of the Maori of old may be summed up in the words of an old Native friend of mine who said, "The gods of the Maori were their own ancestors": inasmuch as the Maori traces his descent from everything on, under, and above the earth. Any intelligent

Maori can give his genealogical descent from Rangi and Papa—*i.e.*, from the Sky Father and the Earth Mother. Also they trace descent from the sun, moon, and stars, as well as from the various personifications of the elements, &c.

This element of ancestor worship is traceable throughout Maori history, traditions, &c., even to late times. Many noted ancestors of these people are believed to have become *atua* or demons. Some of these were much dreaded on account of their malignant treatment of the living, while others were invoked by their descendants when their aid was required, as in accidents such as the capsizing of a canoe.

The vast majority of Maori *atua* (gods or demons) were essentially powers of evil, the desirable thing being to propitiate such gods and thus turn their power of evil against one's enemies.

The Maori did not worship his *atua* as we understand the term "worship." They were propitiated by presents of food and invoked by means of *karakia* (invocations, incantations) when their services were required.

Most of these so-called gods had their *aria*, or form of incarnation, such as a bird, or reptile, the rainbow, &c. Such forms are said to have been placated by the priests who were the mediums (*waka*) of such gods. At the sacred place of a village were set up certain sticks which were carved into the semblance of the human form. When a priest wished to consult his god, he addressed his invocations to such emblems which, for the time being, were endowed with the spirit or essence of the god. But ever the Maori clearly understood and taught that such emblems were not gods but merely the representations of such. Hence it is manifest that the Maori were not idolators in the true sense of that term.

The Maori seer was an important personage in the days of yore. He was usually a priest, and the medium of a god. When a tribe was about to send out a war-party the priest would consult his god, who served the purpose of a tribal oracle. During the time the priest was "possessed" by his god, the latter would impart to him divers rules and instructions to be followed carefully by the members of the war party. If these were observed to the letter then success was assured; but should any warrior transgress such rules, then disaster lay before.

Certain of the priests had the power to send their god to slay an enemy or to recover stolen property. Such gods would sometimes be seen flying through space in the form of a comet or star, &c.

Both men and women became mediums through which their dead parents or ancestors warned their living descendants of impending danger or death. Such communications were received during both the sleeping and waking hours of the medium.

Many different rites of divination were performed by the priests, as also the sacred ceremonies pertaining to the dead and the rites performed over newly-born children, whereby health, vigour, and intellectual strength were imparted to the child. These priests

were the doctors, lawgivers, and teachers of the tribe. None were exempt from the rigid rules of *tapu* which entered into every phase of tribal life. Priests of great power and prestige are said to have possessed the power of bringing the dead back to life, of passing unharmed through fire, of causing the thunders of heaven to sound at will.

The elements of fire and water entered largely into these various rites. The dread *tapu* of the war god was placed upon a war party as the members thereof stood naked in or by a stream or pool. The evils of witchcraft and sickness were averted at a similar place, as also the ancient rites performed over babes and young warriors, and that which caused a barren woman to become fruitful. Such rites were performed after sundown or at dawn of day.

Sacred fires were used during ceremonies pertaining to death, the lifting of the *tapu* of an important new house, the opening of the bird-taking season, &c.

The Maori priest of yore possessed a most plentiful budget of incantations and invocations. Many of these contain words of a sacerdotal character, which are now obsolete in the vernacular, if indeed they ever formed a portion of it. These archaic expressions and idioms are most interesting to the philologist.

It is firmly believed by the Natives that the decadence of their race is due to the fact that the sacred life-principle of the people has become degraded through contact with the tapuless white invaders of their country. This belief in the sacred nature of man is but a natural sequence of the belief in the descent of man from the gods, and from the elements and heavenly bodies. There are signs in the various rites and invocations of an ancient system of phallic worship.

Maori Proverbs, Etc.

The Maori people of New Zealand possess an immense number of proverbial sayings, tribal aphorisms, &c., in their language, which sayings are much used by their orators in speech-making. Like other mytho-poetic peoples, they deal largely in simile and quaint expressions handed down from antiquity through many generations. We give a few of such sayings as illustrative of the manner in which they were connected with the surroundings and home-life of the people, with their various pursuits, &c.

"Ka pu te ruha, ka hao te rangatahi" (The old worn-out net is cast aside, the new net takes up the work). This is applied to a son succeeding to and taking up the work of his aged parent.

"Tuhoe moumou kai, moumou taonga, moumou tangata ki te Po" (Tuhoe, wasters of food and property, destroyers of mankind). A saying applied to the Tuhoe Tribe, who from their rugged mountains were wont to raid down upon the lowlands, devastating the country, and despatching the people thereof down to Hades.

"He manu hou ahau he pi ka rere" (I am a young bird, a chick just leaving the nest). This remark was made by Te Maitaranui of Tuhoe, when captured by enemies, meaning that he was a mere youth, and hence scarce worth slaying.

"Kaua tatou e tukua kia mate a whare, engari kia mate a ururoa" (Do not let us die in a house—*i.e.*, a natural death—rather let us die as does the shark, fighting to the last). The old-time Maori preferred to die in battle.

"Me te rangi i whanau ai a Te Rangi-tauarire" (Like the day on which Te Rangi was born). Applied to a fine pleasant day. Te Rangi was noted as a fine, handsome person, possessing many good qualities.

"Me te rangi i whanau ai a Horu" (Like the day on which Horu was born). A saying applied to a stormy, disagreeable day. Horu was an ill-favoured person, who practised the deadly arts of witchcraft.

"He kura kainga tena e hokia" (Ever we desire to return to domestic peace and happiness).

"Me haere i raro i te kahu korako" (Always travel under the white hawk). In travelling always endeavour to join a chief's party; you will thus obtain plenty of food.

"He wahine, he whenua, e ngaro ai te tangata" (Through women and land is man lost). Women and land were the most common causes of war.

"He tao rakau ka taea te karo, he tao ki e kore e taea" (A spear-thrust may be warded off, not so the thrust of a sharp tongue).

"Waiho ma te whakama e patu" (Leave him to be slain by shame). Though an evildoer, yet will we not slay him; rather let the feeling of shame punish him.

"He kino tangata e kore e taea, he kino rakau ka taea" (Human faults cannot be cured, but faulty timber may be utilised).

"Whatu ngarongaro he tangata, toitu he whenua" (Man perishes, but land endures for ever). Do not make your bed comfortable, lest you sleep too soundly. Rather sleep on rough ground that you may awaken readily, and thus escape the war party.

"He toa taua, mate taua; he toa piki pari, mate pari; ko te toa ngaki kai, ma te huhu tena" (The warrior shall perish in battle, the cragsman shall die by cliff side, but the husbandman alone shall decay of old age).

"Hohonu kaki, papaku naua" (Deep throat, shallow muscle). Applied to an indolent person.

"Ka riro ake ana te weka i te mahanga, e kore e hoki mai." (The bird that escapes from the snare will not return).

PART IV.—DESCRIPTIONS OF LAND DISTRICTS.

THE AUCKLAND LAND DISTRICT.

G. Mueller, Chief Surveyor.

Introductory.

The Auckland Land District covers about four and a half degrees of latitude, extending from 34° 30′ to 39° S., its greatest length being about 365 miles, from the North Cape to the 39th parallel, south of Lake Taupo, while its greatest width is about 180 miles. In the peninsula north of Auckland, indented as it is on either side by harbours and arms of the sea, and with a mean width between the Pacific Ocean and Tasman Sea of little over forty miles, the range of temperature is remarkably small. The thermometer seldom registers above 80° in the shade in the middle of summer, whilst the heat is always tempered by a cool breeze, bringing the mean summer temperature to under 70° in the shade. The frosts are hardly worth mentioning, as the minimum register is seldom below 40°; but south of Auckland sharp white frosts occur very often, more especially beyond 38° of latitude, and snow lies upon the summits of some of the highest hills or mountains in winter.

Physical Features.

This land district may be said to have no real mountains, as the most prominent peaks of the several scattered ranges or hills seldom exceed 3,000 ft. in height above the sea-level, an altitude just enough—south of 38°—to clothe the last 1,000 ft. with snow in the depth of winter. North of Hokianga and the Bay of Islands there is one well-defined range of hills rising to a height of 2,463 ft.; whilst south of these places, and extending to the Wairoa River on one side and the Whangarei Harbour upon the other, the country is all more or less broken into ranges from 1,000 ft. to 2,000 ft. in height, with valleys between. The next really well developed main range lies within the Coromandel and Thames Peninsula. With a length of over 150 miles, it has an average height of over 2,800 ft., commencing with Moehau, or Cape Colville, 2,935 ft.; next, Te Aroha, a peak of 3,176 ft.; and ending at Weraiti with a height of 2,527 ft. There are two other well-defined ranges—namely, Tawairoa and Hauturu—lying between the West Coast and the Waipa basin, with their highest peak at Pirongia, which rises to 3,156 ft., and is often snow-capped. There are other ranges forming the watershed between the basins of the Waikato and Waipa Rivers, and dividing both from the streams running into the western side of Lake Taupo. Their highest peak is Pureora, rising to 3,793 ft. The eastern side of the land district is occupied by a very broken, forest-clad country, known as the Urewera country, the average height of which is about 2,500 ft. It is practically unexplored, and, being still in the hands of the Natives, is not as yet available for settlement. To the east of Lake Taupo lie the Kaimanawa Ranges, of about 4,500 ft., and generally open on the ridges, with valleys clothed in beech forests. Nearly the whole of the Auckland Land District is indented on both coasts with harbours and arms of the sea, forming a cheap and easy means of access. Of rivers, properly so called, there are only two of any great length—namely, the Wairoa and Waikato. The first empties itself into the Kaipara Harbour, a large arm, or rather succession of arms, of the sea, giving hundreds of miles of inland water-carriage to all parts of the Counties of Hobson, Otamatea, Rodney, and Waitemata. This river is navigable from its mouth to its junction with its tributaries Wairua and Mangakahia, a distance of ninety-one miles from the sea, and for forty miles it is navigable for ships of large burden. The River Waikato

has a course of 200 miles, measured from its source in the Ruapehu Mountain through Lake Taupo to the sea on the West Coast. It is navigable for river-steamers for seventy-five miles from its mouth, and its tributary, the Waipa, for twenty miles from its confluence with the Waikato at Ngaruawahia. Another river —the Thames, or Waihou—though of no great length, affords a valuable means of inland water-carriage, and is navigable for small steamers for twenty-five miles. Generally speaking, every part of the district has an abundant water-supply, now and then lessened for a short time at the end of a very dry summer.

Plains.

Of plains proper, this district has only the stretch of country called Kaingaroa, extending from the eastern side of Lake Taupo towards the Bay of Plenty, all more or less of a pumice formation; the valley of the Thames, and the delta between the Thames and Piako Rivers, which is generally level, the quality of the soil varying very much in different parts; and the Central Waikato basin, already thickly settled. Here and there in the North there are level plateaux of volcanic soil, more or less densely wooded, and along the main rivers there are stretches of level country, but there are no large plains of alluvial soil such as the Middle Island can show.

Lakes.

Of these, which add so much to the scenery of a country, this district possesses a fair share, there being eight principal lakes, with some twenty or more smaller ones. To the north of Auckland, in the Bay of Islands district, there is only one lake of any size, called Omapere, three miles by two miles, an old crater. In the Waikato are Lakes Waikare and Whangape, the first six miles and a half long by three miles across, and the second five miles by one mile. These lakes are generally covered with numerous wild swans and ducks, and, being both connected with the Waikato River by navigable creeks, form a convenient waterway for transport of goods to settlers living around their shores. All the remaining lakes of large size are within the watershed of the Thermal-springs District, and are mostly from seven to eight miles long, and from three to six miles wide, except Taupo Moana, the queen of the North Island lakes, which is twenty-five miles long and eighteen miles broad, with a depth of 500 ft. The scenery round its western shore is of the most romantic kind.

Forests.

The greater part of the Auckland Land District has been covered in the past with dense forests, which are now fast disappearing under the axe of the settler and being transformed into rich pasture-land. The only really good Crown lands fit for settlement in the North are still all covered with forest, and must be cleared and sown before any returns can follow. The area of forest land in the Auckland District at the present time is about 1,800,000 acres north of Auckland, and 3,420,000 acres south of it. The forests contain a mixture of trees of all kinds, from the giant kauri to scrubby tea-tree or manuka, but all the bush is useful for building, fencing, and household purposes, or at any rate may be converted into charcoal for sale. Of the giant kauri (the most valuable tree in New Zealand) great quantities, worth as much as £1,000,000 per annum, are being yearly cut, and exported or used for home consumption. To give some idea of the size of these trees, and the amount of timber contained in them, it is estimated that upon the Crown land to the north of Auckland, in the Counties of Hokianga, Hobson, Bay of Islands, and Whangarei, there are still remaining 498,000,000 feet, of a value, as the timber stands, of half a million sterling.

Soils.

With respect to the soils of Auckland, nowhere in New Zealand within such short distances is there such a diversity in the quality—a distance of half a mile often makes all the difference between rich alluvial and barren pipeclay. To the north of the Bay of Islands and Hokianga the lands are chiefly clay and sandstone, with here and there a volcanic area intervening. In and about the valley of the Mangonuiowae River, in the Hokianga County, there is some of the richest

alluvial soil in the district; and, taking the whole Crown land remaining to the north of a line between the Hokianga and Bay of Islands Harbours, the really available good land fit for settlement would be about 40,000 acres. There are large areas outside of this which will carry good grass and feed one or two sheep to the acre, after clearing and laying down in grass; and there is also land highly suitable for fruit-growing. South of Hokianga, and between that place and the Wairoa River, the soil is, generally speaking, very good, being both volcanic and alluvial. Here the Crown has probably 150,000 acres of such land fit for settlement. Immediately south of the Bay of Islands, and extending thence to Whangarei, the soil is, for the most part, clay lying upon sandstone or marl, with alluvial flats in the bottoms of the valleys; but these are, as a rule, very narrow. Within the Puhipuhi State Forest there is an area, say, of 16,000 acres, more or less, of volcanic soil. Approaching Whangarei, at Hikurangi, the limestone crops out, overlying coal-deposits, and round Whangarei itself the soil becomes a rich volcanic, in a high state of cultivation. South of Whangarei Harbour, and from thence to Auckland, the Crown lands generally are of a broken character, with soil varying from alluvial swamps—as in the case of the Tokatoka Swamp of 16,000 acres—to the limestone areas round Maungaturoto, the sandstone and clay lands of Rodney County, and the poorer clay lands lying north of the City of Auckland, which have, however, proved eminently suitable for fruit-growing.

For about 200 miles south of Auckland the land (with the exception of the Cape Colville Ranges) is, generally speaking, far less broken, and gradually opens out into large tracts of level country in the Waikato and Waipa basins. Immediately south of Auckland the soil is rich volcanic until it is gradually superseded by the prevailing clays; the greater portion of Manukau County, for thirty miles south of Auckland, may be classed as pastoral, and is under occupation as such. The Crown areas available for settlement—say, 16,000 acres—are chiefly in the Otau Parish, varying from volcanic clay to ordinary clay land, forest-clad, and well adapted for pastoral purposes. In the Counties of Waikato, Raglan, Waipa, Piako, West Taupo, and Kawhia, there is a still greater diversity of soils; Raglan County contains large areas of good limestone country, broken, but with rich black soil, and carrying most luxuriant grass. The lower Waikato country consists of clay soil and extensive swamps, almost undrainable, but at a distance of eighty miles from Auckland is found a flat and undulating country, lying partly within the Waikato and Waipa basins, and partly within the valleys of the Piako and Waihou Rivers, formed mainly of alluvial deposits of rhyolite sands brought down from the volcanic districts. In the Kawhia County there are some 300,000 acres of excellent limestone land, a large portion of which is heavily timbered, with numerous warm valleys. Most of this land has now been acquired by the Government from the Native owners, and is being opened for settlement. Beyond this there is a large stretch of country consisting alternately of open valleys and forest-clad hills, a fair proportion of which is good land, both pastoral and agricultural. The County of Coromandel, with portions of Thames and Ohinemuri Counties, is chiefly devoted to the mining industry. The soil is nearly all clay, the land very broken, but suitable for pastoral purposes if cleared of the dense forest that now covers it. The western portion, however, of the Thames and Ohinemuri Counties contain large areas of alluvial and swamp lands, now in the hands of the Crown, but, through want of drainage, not yet available for settlement.

In the County of Tauranga, the clay lands extend from Te Aroha Mountain to Katikati entrance, changing, near Tauranga, to sandstone and black pumice soil of rich character, which improves towards Te Puke and Maketu, where the land is all good, and more or less volcanic. In Whakatane and Opotiki Counties there are very extensive swamps, of which large portions are drainable, and back from the coast seven miles or so are large areas of Crown lands, broken and forest-covered, opened ready for settlement. The soil is chiefly clay or light loam, with alluvial flats in the valleys, and all well watered. This kind of country extends to the boundary of the land district. The coastal lands are nearly all alluvial flats in a high state of cultivation, and the settlers mostly well-to-do.

Review of Soils: Uses and Returns.

Briefly to set forth the capabilities of the Crown lands in the district, it will suffice to say that north of the Bay of Islands and Hokianga the land is suitable chiefly for two classes of persons—the gum-digger, and the fruit-grower or small farmer. The former has the range over large areas of Crown lands upon paying a small fee, and his earnings average from 5s. to 10s. a day. As for the latter, in and around Hokianga, with its 250 miles of water-frontage, almost anything can be grown, from the tropical banana to the more prosaic potato, whilst oranges and lemons flourish side by side with all kinds of apples, pears, and plums. Wheat does fairly well, and maize gives a return of 50 to 60 bushels an acre. Sheep also thrive; and most of the lands, when properly grassed with artificial grasses, will carry two or three sheep to an acre, but ordinary rough-grassed lands only one and a half to two sheep per acre. The Messrs. Williams, at Pakaraka, are feeding four sheep to the acre upon land sown with furze. The clearing of forest lands, ring-fencing and grassing them, will cost about £3 to £3 10s. per acre. The same remarks apply to the Bay of Islands and Whangarei, and to the country as far south as Auckland. Round about Whangarei district, and under similar conditions of culture, the average return for good agricultural or pastoral lands would be fully 12s. an acre per annum. South of Auckland, throughout the Waikato, Piako, Waipa, and Raglan Counties, and thence south to the district boundaries, the land is both agricultural and pastoral. All the cereals do well, wheat averaging 27 to 30 and up to 40 bushels per acre, and oats 26 bushels per acre. Potatoes average from 5 to 7 tons per acre. Dairy-farming is carried on, yielding (upon well-cultivated farms) a net profit of 15s. to 2[illegible]s. an acre per annum; whilst sheep-farming yields a profit of from 5s. to 7s. 6d. a sheep per annum on very large estates; allowing for greater losses from disease, &c., the average return would still be 4s. per sheep. The cost of clearing fern and scrub is generally from 7s. to 10s. an acre, and laying down fern land by surface-sowing and harrowing, about 17s. an acre.

The seaward counties of Tauranga, Whakatane, and Opotiki are both agricultural and pastoral, growing wheat and maize alike to great perfection. In fact, these counties, upon their alluvial shores and uplands, grow the greater portion of the maize produced in the district, and from the ports of Whakatane and Opotiki in one year some 34,000 sacks have been exported. In these counties the average yield of wheat is from 22 to 25 bushels per acre, oats about 29 bushels per acre, and maize 45 to 60 bushels per acre. It is quite possible within this district to select land early in the winter, fell and burn off by the ensuing summer, sow in grass in the autumn, and put on stock within twelve months from selection.

Rainfall.

The rainfall during the year averages about 39 in., the greater portion of which, as a rule, falls between the 1st of May and 1st of November, or during the winter and spring months. Owing to the constant changes of wind, caused by the configuration of the coast-line, the shortness of the distance between the two coasts, and the influence, greater or less, of the trade-winds, it is quite common for one neighbourhood to have double the rainfall of another, even though the two be only twenty miles apart. Droughts of more than a couple of months are practically unknown, and grass is always abundant.

Winds.

One of the chief means whereby the great healthiness of the climate is maintained is the constant presence of fine breezes, blowing both summer and winter, the prevailing winds being north-east and south-west, and very seldom passing into really heavy gales. In the middle of summer, the sea-breeze during the day and the land-breeze at night are almost unvarying.

General Products and Industries.

Timber.—The vast forests of kauri and other valuable trees have given this district the foremost place for production and export of timber. There are many safe and sheltered harbours for shipping, while streams and rivers without number

form convenient highways for conveying logs to the mills or ports. Some idea of the extent of this industry may be given by quoting from the official returns made at the time of census of 1896. There were then forty-nine steam sawmills situated in various parts of the district, with engines of a total of some 2,000-horse power. These mills employed over a thousand men, and produced yearly some 80,000,000ft. of sawn timber, valued at £301,328; of timber resawn into flooring, skirting, &c., some 21,000,000ft., valued at upwards of £91,000, not to mention posts and rails, mouldings, sashes, and doors. Besides this output, in the remoter parts of the district large quantities of timber are hand-sawn. The durable puriri is converted into railway-sleepers, for which there is a great demand, and the totara is largely sought after for telegraph-posts and wharf-piles.

Kauri-gum.—The most unique production of this portion of the colony is kauri-gum, obtained for the most part from the country north of Auckland. It is formed by the hardening of the exuded turpentine from the kauri tree, and is dug out of ground from which the forest has been burnt off. The Royal Commission appointed in 1893 elicited the fact that the procuring of the gum gave employment then to no less than 6,897 persons. Last year 10,159 tons were exported, valued at £622,293. The kauri-gum is extensively used in the manufacture of varnish, and also for glazing calico. Nearly two-thirds of the varnishes in the market are produced from this gum. The average earnings of a digger may be taken as from £1 7s. to £1 10s. per week.

Flax (*Phormium tenax*).—An industry, which has assumed large proportions, is the conversion of the broad leaves of the *Phormium tenax* into marketable flax suitable for the manufacture of rope, twine, mats, mattresses, and numerous other articles. The flax-mills are scattered over different parts of the district, as near rail- or water-carriage as possible, and employ a considerable number of men and boys, whilst the local rope-and-twine works give work to a good many more. The export from all parts of the colony of phormium for the year 1900 was 15,906 tons, valued at £332,182, besides 458 tons of tow, valued at £1,620.

Gold.—This district has in the past produced large quantities of gold, but the area over which auriferous quartz-reefs have been discovered is limited to the Counties of Coromandel, Thames, Ohinemuri, and a small portion of Piako. In 1900 the output of this neighbourhood was 45 per cent. of all the gold produced in New Zealand, the quantity (166,342 oz.) entered for duty for exportation having been valued at £605,398. From 1878 to 1892 the Thames Goldfield alone produced some 600,000 oz. Now that the area over which auriferous quartz-reefs have been discovered has increased, a much larger output may be expected in the future. The total estimated value of the gold was £604,018 for 1900-1901, against £625,207 in the previous year. All the gold won was obtained by battery amalgamation, and the bullion by the cyanide process. There is a large amount of English capital being expended in developing new discoveries in out-districts away from the goldfield, but it will be some time yet before these discoveries have reached their full development. At the Thames there is a School of Mines, well attended and showing good results.

Coal.—Coal is found in most parts of this district, and is being worked with more or less success at Kawakawa, Hikurangi, Kamo, and Ngunguru, to the north of Auckland; whilst in the south there are three mines at Huntly, all turning out a good household coal. The total output of all the mines in 1900 was 160,303 tons.

Fruit.—The climate of the Auckland District is well adapted for the growth of the orange, lemon, vine, and olive, as also for the fruits of England, America, and Japan. The subtropical kinds flourish about Hokianga, in the north; those of the temperate regions, in the Waikato and neighbourhood. Now that the problem of how to land fruit in good condition in the London market has been solved, orchard planting is rapidly progressing, and it has been found that the culture of the hard varieties of the apple will repay export to England. Of late years a demand has set in for the poor clay-land that used to contain gum, as it is admirably suited for fruit-growing. Orchards are now planted in neighbourhoods where the soil has lain idle for years, for it has been proved that apples grown on this poor soil keep longer than those grown on richer land. What can be done by cultivation and care on

poor lands is evidenced at the Waerenga Government Experimental Plantation in the Waikato, where the two orchards of fruit trees and vines show most luxuriant growth. More attention is being just now paid to stone fruits, for which there is always a steady local market, than to apples, which have of late years been heavily handicapped by blight. The fruit industry in Auckland is yet in its infancy, and is capable of great extension. At present peaches are the only fruit canned, though there is also a good deal done in the way of drying fruits and vegetables by the process of evaporation.

Fishing.—The sea and harbours abound in fish. At least eighteen different varieties suitable for the table are caught with little labour, and settlers living near the sea-coast or any one of the many harbours and tidal rivers can always obtain enough for all necessities. At present the canning industry is confined to mullet, of which there is a large amount exported, and an equal quantity used for home consumption. The rock-oyster is found over a large area on these coasts, and large quantities are sent both to the southern ports of the colony and also to Australia.

Chief Centres and Surrounding Districts.

The City of Auckland lies on the southern shore of the Waitemata Harbour, one of the finest havens in the colony, on a narrow neck of land between the Waitemata and the Manukau. Alike from the sea and from the neighbouring hills the city and surrounding country present a charming picture. Especially fine is the view from Mount Eden, a low volcanic hill in the suburbs. Facing the town are the green hills and white houses of the North Shore, and the remarkable peak of Rangitoto; beyond lie the many islands of the Hauraki Gulf, with the blue hills of Coromandel and the Great Barrier in the far distance. Clustered near the foot of the hill, and scattered for many miles to the southward, are charming villa-like houses, with tasteful gardens and shrubberies, while to the north-west the view is closed by high wooded ranges. The city is unrivalled for its commercial position; it has communication by sea with both sides of the Island, while the Kaipara and Wairoa Rivers leading far into the northern peninsula, and to the south the Waikato and Thames Rivers leading into the heart of the Island, give it excellent natural facilities for inland communication. In March, 1901, the population of the city and suburbs amounted to 67,226 persons. The city is well supplied with gas and water, and amongst public buildings may be noticed Government House, the new Government Offices, Post and Telegraph Offices, Supreme Court, &c. There is a Free Public Library and Art Gallery, and a good Museum, containing what is probably the best Maori collection in the world. The Auckland University College is affiliated to the New Zealand University. The Victoria Arcade, the Exchange, Harbour Board Offices, hotels and clubs, as well as many commercial buildings, compare favourably with those in other parts of the colony. There are admirable recreation-grounds, including the Government Domain of about 180 acres, as well as the Botanic Garden and the Albert Park in the centre of the city. There is a tramway system extending through the suburbs. Auckland has numerous industries, including, amongst others, ship-building, sugar-refining, timber-converting, sash-and-door manufactories; rope-and-twine, pottery, brick-and-tile, and varnish works, printing-offices, &c.

The City of Auckland is the centre from which radiate all railways, road-, and steamer-routes. From it, by rail, lies the way to all Crown lands south of the Waitemata, while the Kaipara Railway connects it with the country north of Helensville. All lands to the north and along the Bay of Plenty are reached from its wharves by the Northern Company's steamers. The chief centres to the north are:—

Warkworth, on the East Coast, forty miles from Auckland, with communication by coach and steamer nearly every day. It is a thriving township, with post- and telegraph-office, public halls, hotels, &c. It is also the site of important hydraulic-lime and cement works. A good deal of agricultural and pastoral farming is carried on in its neighbourhood.

On the West Coast an important centre is Helensville, on the Kaipara Harbour, distant thirty-six miles from Auckland, with which it is connected by rail. It has all the conveniences required by travellers in the shape of good hotels, stores, &c., and

is the starting-point of the river-steamers running to al places in the Otamatea and Hobson Counties. It is also one of the main centres for the export of balk timber.

Dargaville, on the Wairoa River, is a town of about 500 inhabitants, with all conveniences for travellers. It may be reached by rail and steamer from Auckland three times a week. Dargaville is the starting-point of the Kaihu Valley Railway, which is open for traffic for twenty miles from the town, and from the terminus of the railway all the Crown lands in the neighbourhood are reached, even so far north as Hokianga. The town is also the centre of a very large timber export. There are only two townships of any importance north of Dargaville—Port Rawene, or Hokianga, and Kohukohu, about four miles further up. Both have post- and telegraph-stations, and comfortable hotels, with fortnightly steam-communication from Auckland.

Whangarei, on the East Coast, is distant seventy-five miles from Auckland, with which it has steam-communication twice a week. The town is a thriving and important place, having a population of about 1,500, and is the centre of a large agricultural and pastoral country. In the neighbourhood is also a large coal-bearing and gum-producing district, while the export of oranges and lemons, which thrive magnificently on the rich volcanic soil, is on the increase. From here a coach runs weekly to Kawakawa, upon the arrival of the Northern Company's steamer, and from it, by carriage or horse, all lands can be visited within a radius of thirty to forty miles.

Kawakawa, at the head of the tidal portion of the river of the same name, is connected by a short railway-line with Opua, the calling-place of steamers from Auckland. Kawakawa possesses good inns. From it coaches run weekly to Hokianga and Whangarei. It is the centre of a coal and gum industry, and a port of lading for those products. The old town of Russell is situated further down the bay, and has a good hotel, besides having a post- and telegraph-office. To Whangaroa, Mangonui, Awanui, Hohora, and Parengarenga the Northern Company's steamers run every week. Whangaroa is famed for its exquisite scenery, and is the centre of a large timber- and gum-export trade. Mangonui is the starting-point and centre from which to visit, by carriage or horse, all the Crown lands in the Mangonui County.

South of Auckland, along the Waikato Railway, there are numerous townships of more or less importance, but no starting-point for Crown lands until Mercer is reached at a distance of forty-three miles. It is situated at the borders of what is known as the Waikato Country, upon the Waikato River, which is tidal up to this point, and the township has a post- and telegraph-office and other conveniences. At sixty-five miles from Auckland by rail is Huntly, also on the Waikato River, a flourishing township, with a very large output of valuable coal. It has also pottery-, brick-, and tile-works. On the opposite side of the Waikato River large areas of Crown lands are being brought into use, and are carrying large quantities of sheep and cattle. The next town is Ngaruawahia, or Newcastle, seventy-four miles from Auckland, situated at the junction of the Waikato and Waipa Rivers, with hotels, bank, post- and telegraph-office. It is a centre from which portions of Crown lands in Raglan County are reached, and also from it river-steamers run north and south to the various settlements. Ngaruawahia has a flourishing creamery, a brewery, and a cooperage. At eighty-four miles from Auckland the train reaches Frankton Junction, where a line branches off to Hamilton, Te Aroha, Paeroa, Thames, and Rotorua, the main line going to Te Awamutu, ninety-nine miles from Auckland. The latter is a thriving town; but to reach available lands for future settlement the traveller passes on by rail to Otorohanga; Te Kuiti and Poro-o-te-Rau, fifteen and twenty-five miles further on respectively, are both of them places at which there are accommodation-houses, forming convenient centres for visiting the fertile undulating limestone lands in the vicinity. Hamilton is a busy, flourishing town, situated on both sides of the Waikato River, with a population of about 1,300 persons, and is the centre of a large agricultural and pastoral district. It possesses a creamery, flax-mill, brewery, and two soap-factories, besides other local industries. Cambridge, about thirteen miles by road and fifteen miles by rail from Hamilton, has a population of about 1,000, and is the

headquarters of the Farmers' Club. It is a busy, thriving township, surrounded by good farming country. Between Hamilton and Cambridge, and in the country round, there are numerous creameries, cheese- and butter-factories; wine- and cider-making is also successfully pursued, and there are several apiaries, from which large quantities of honey are produced. There are three flour-mills in the district, one at Cambridge, one at Hamilton, and the third at the terminus of one of the before-mentioned branch lines. One hundred and sixteen miles from Auckland by rail is Te Aroha, a quiet township, celebrated for its thermal springs and good hotels. Another thirteen miles brings the traveller to Paeroa, a centre of mining industry, and in another twenty-nine miles the Thames Borough is reached.

The settlements at the Thames and Coromandel are essentially mining townships. The first is situated thirty-eight miles by steamer from Auckland, on the Firth of Thames, and at the mouth of the Waihou River. It has a population of about 4,000 persons. There is daily rail- and steam-communication with Auckland, and a railway connecting it with Paeroa and Te Aroha. Coromandel is about thirty-five miles from Auckland, with which it has constant communication by steamer; it is another mining centre, situated at the head of a picturesque harbour. Tauranga, with a population of about 1,000, is situated on the harbour of that name in the Bay of Plenty. Coaches run thither from the Thames, and from Rotorua; it has also constant communication by steamer with Auckland, and with Matata, Whakatane, and Opotiki. From the fact of the harbour being the only one on the East Coast capable of receiving large vessels the town is bound to be of importance in the future. Tauranga has a chemical and sulphuric-acid works, and a cheese-factory.

Opotiki, the second town of importance in the Bay of Plenty, is situated about sixty-five miles by steamer or road from Tauranga. It has weekly steam communication with Auckland, and is connected with Gisborne by a bridle-track. It is the headquarters of the maize-producing district, and has rich alluvial lands, from which good returns are obtained. It is a good starting-point from which large blocks of Crown lands suitable for pastoral purposes may be reached.

The Township of Rotorua is situated on the shores of Rotorua Lake, at a distance of 172 miles from Auckland. Travellers can reach Rotorua in one day from Auckland. It is the chief township in the hot-lakes district, and has also a large area of fairly good Crown land near, adapted for pastoral purposes. Considerable quantities of sulphur are obtained from the neighbourhood.

Crown or Native Lands available for Future Settlement.

In the Mangonui County the Crown possesses 29,300 acres of fairly good forest land, tolerably easy of access.

In the Bay of Islands County there are only about 32,900 acres of available Crown land, both forest and open, but the Natives still own some 152,000 acres, chiefly forest land, except about Kaikohe, where it is open and rich volcanic land, most of it broken, but fit for settlement.

In Hokianga County there are some 151,900 acres of available Crown land, of good quality, nearly all covered with forest, and fit for immediate settlement. The Natives still own some 104,650 acres, almost all good land, and fit for settlement.

In Whangarei County there are about 48,000 acres of available Crown land, mostly broken and forest-clad. The Natives still retain some 28,850 acres of land, part of it very rich.

In the Otamatea County the Crown retains only about 15,800 acres, a good deal of this being alluvial swamp, and now well drained. The Natives still own about 20,000 acres, but not much of it is fit for settlement.

In the Rodney and Waitemata Counties about 30,000 acres of Crown lands are left, most of it fit only for pastoral or fruit-growing purposes. The Natives still own about 14,000 acres in these two counties, some of it very good land.

In the Manukau County the Crown owns some 5,200 acres of broken forest land, fit for pastoral purposes. The Natives still own about 15,000 acres, a portion of which is fairly good.

In the Waikato and Raglan Counties the Crown lands amount to about 76,100 acres, all fairly good land, mostly forest, and easy of access. In Raglan County the Natives still own the freehold of 150,000 acres, all good land.

In the Coromandel, Thames, and Ohinemuri Counties there are about 332,900 acres of available Crown lands, a great deal of it too broken for settlement. In the last two counties a good deal of the land is swampy, and requires draining. The Natives still own 97,200 acres, much of which is very good.

In Tauranga, Whakatane, Opotiki, and Rotorua Counties the Crown owns 413,000 acres, nearly all forest-clad, and generally broken; but in the last-named county the Natives retain a very large area, the greater part too broken or too much covered with pumice or volcanic ash to be fit for settlement.

In the Kawhia and West Taupo Counties the Crown is acquiring from the Natives large areas of very good land, all fit for settlement and easy of access. About 300,000 acres are really first-class land, and about 1,000,000 acres fairly good land, all suitable for pastoral purposes, and accessible from the Main Trunk Railway-line.

The Crown now hold about 177,800 acres in Kawhia County—100,000 acres having been surveyed and made available for settlement—and 129,700 acres in West Taupo County.

THE TARANAKI LAND DISTRICT.

J. STRAUCHON, Chief Surveyor.

The Taranaki Land District is situated on the western side of the North Island of New Zealand, at about its widest part, and may be said to be the most compact and fertile district of the colony, for, with the exception of the upper half of Mount Egmont, and of the ranges adjoining, which absorb about 36,000 acres, the whole of the area—minus what is taken up by the rivers, streams, and lakes—is suitable for settlement, and certainly two-thirds of the district is good land. The gross area of the district is 2,430,000 acres.

Physical Features.

Of mountains, the principal one is the beautiful volcanic cone from which the district takes its name, Taranaki, otherwise called Mount Egmont, which has an altitude of 8,260 ft. This mountain is the centre of distribution for a radius of twenty miles of the volcanic formation known as the "drift," which covers the volcanic rocks below an altitude of 3,000ft. Hummocks composed of trachyte boulders and cement crop up here and there and make excellent metal-quarries.

Beyond the volcanic formation—that is, from about Urenui on the north and Hawera on the south—the country is generally broken, and the formation is known as papa, a calcareous blue clay, capped in many places by shelly limestone.

The northern portion, between the Tongaporutu and the Mokau Rivers, contains also limestone, greensands, and coal outcrops. At Panirau, a small tributary of the Mokau, about thirty miles from the sea, there is an isolated patch of volcanic agglomerate and tufas, and a similar formation is found at the north-eastern corner of the district.

Eastward of the base of Mount Egmont there are few, if any, mountains worthy of the name, although there are many ranges varying in height from 1,000ft. to 1,500ft. above sea-level, and, in a few instances—such as the Matemateonga and Waiaria Ranges—they run up to 2,500 ft.

The principal river is the Wanganui, which bounds the district on the east between Taumaranui and Pipiriki, a distance of about ninety miles. Its average width varies from 2 to 3 chains. For nearly the whole distance it is shut in by high precipitous hills, and in many places by perpendicular walls of rock. The scenery is very grand and beautiful. There are numerous rapids, but few of them are dangerous to skilful canoeists. Steamers run regularly from Wanganui to Pipiriki, a distance of fifty-five miles.

Messrs. Hatrick and Co. have recently commenced to run their new steamer "Wai-iti" between Pipiriki and Putikituna, some twelve miles up the Tangarakau

River. From this point a road (nine miles in length) is being constructed to join the Ohura (or East) Road at a point about forty-seven miles from Stratford, and in the middle of the Whangamomona Improved-farm Settlement, the settlers in which and surrounding blocks will thus have double communication, with Wanganui on the one hand and Stratford on the other. When the road is completed through to Auckland, tourists can enjoy a trip up the Wanganui River as far as Ohura, then back, and up Tangarakau River across to Ohura Road, then on to Auckland, or back to Stratford, as they desire. The dimensions of the "Wai-iti" are 40 ft. long by 8 ft. beam, with a light draft of 9 in. and passenger capacity for forty, the amount of cargo depending on quantity of water in river from time to time. The time-table as at present arranged is: Leave Putikituna for Pipiriki and Wanganui every Tuesday morning at 10 o'clock, and every Monday leave Pipiriki for Putikituna. It is probable that during the summer this weekly service may be increased to bi-weekly, as the firm intends making an effort to secure a fair share of the tourist traffic for this route. The fares are: Putikituna to Pipiriki, 10s. single, 15s. return; Putikituna to Wanganui, 20s. single, 30s. return, and *vice versâ*; cargo, 50s. per ton, but this will probably be reduced as the channel of the Tangarakau is improved by snagging, &c. The principal tributaries flowing into the Wanganui on the Taranaki side are the Whangamomona, at eighty-two miles; Tangarakau, at eighty-five miles; Ohura, at 114 miles; Ongaruhe, at 143 miles respectively from the Town of Wanganui.

The next river in size is the Mokau, bounding the district on the north. It is navigable for small steamers of 70 or 80 tons as far as the coal-mines, about twenty miles from its mouth, and for canoes as far as Totoro, twenty-six miles further up. Several outcrops of coal are found on its banks, and, as limestone is also present, the river is likely to become an important waterway of the district. The scenery on either side, although not on quite so grand a scale as may be seen on the Wanganui, is very beautiful.

The other large rivers are the Waitara and Patea. The former has its source about midway between the coast and the Wanganui River, in an easterly direction from Pukearuhe, between New Plymouth and the Mokau. It is about a hundred miles in length, and runs out at the Town of Waitara, some ten miles north-east from New Plymouth. There is a bar at the mouth, but steamers of 300 tons can enter safely in calm weather, and, although there are numerous rapids on its course, it is navigable for canoes for about ninety miles.

The Patea River rises in Mount Egmont, and, after traversing a tortuous course of about 110 miles, runs out at the extreme southern end of the provincial district. It has a bar-harbour, with a depth of 13ft. to 14ft. at spring-tides. Steamers of from 40 tons to 50 tons trade regularly to the town of Patea, which is situated a mile or so north of the mouth. The Patea is navigable for canoes for fifty miles.

Besides these rivers there are many smaller ones, and streams innumerable—in fact, no district in the world could be better watered and at the same time be so secure from disastrous floods. It is estimated that between the Mokau and the Patea there are no fewer than eighty-five named streams emptying themselves into the Tasman Sea, fully sixty of which flow from Mount Egmont.

Excepting the Ngaere Swamp, a block of open land near Eltham, 3,700 acres in extent, now partially drained and recently disposed of for settlement purposes, there are no plains, properly so called, in the district, although the stretch of very fertile country lying between the Waingongoro and Otakeho Rivers, comprising an area of about 25,000 acres, is known as the Waimate Plains. Of this area 13,500 acres have been disposed of, and the remainder, 11,500 acres, has been handed back to the Natives as a reserve.

There are no lakes worthy of the name. The largest sheet of water is Rotokare, situate about twelve miles from Eltham; it is about half a mile in length, with an average width of six chains. There are also a few small lakes inland from Waverley, at the southern end of the district.

The whole of the district, with the exception of a fringe of open country along the coast from Pukearuhe to Patea, averaging three miles in width, and containing about 250,000 acres, and some valleys at the north-eastern corner of the district,

about 150,000 acres in extent, was originally covered with heavy forest. Estimating the area already cleared for settlement at 250,000 acres, it will be seen that there still remain about 1,744,000 acres under bush.

The larger timber is chiefly rata, rimu, matai, tawa, kahikatea, kohekohe, pukatea, rewarewa, hinau, with a few totaras scattered here and there. Among the smaller trees may be mentioned the kotukutuku or fuchsia, karaka, and mahoe.

As regards the timber industry, there are altogether twenty-seven sawmills, and the total quantity cut in 1900 was 15,861,000 ft., chiefly rimu (red-pine), kahikatea (white-pine), and matai (black-pine). Most of these mills work together under Association rules and prices, their output for the year being 14,000,000 superficial feet. The others work independently, and their output amounted to only 1,861,000 ft. for the same period.

An area of 72,565 acres, measuring six miles on every side from the summit of Mount Egmont, was originally set apart as a forest-reserve. To this has now been added 1,040 acres on the lower slopes of Pouakai Range, with an additional 5,500 acres on the Patua Range, making a total of 78,922 acres, which has now by Act of Parliament been set apart as the "Egmont National Park," the internal affairs of which are administered by a partly elected and partly nominated Board of ten members. At about three miles within the reserve the forest begins to get stunted; and at four and a half miles it gives place to low wiry scrub, which ceases at five miles, or an elevation of about 4,000 ft. At 5,000 ft. the moss ends; beyond this point to the summit the mountain is composed of loose scoria and lava.

A comfortable house, known as the Egmont Mountain-house, has been built at an elevation of 3,200 ft. on the northern face of the mountain, at a distance of twenty miles from New Plymouth by the Junction and Egmont Roads. Eighteen miles can be driven over, and the remaining two ridden. This house is maintained by the Egmont National Park Board, and is open for the accommodation of visitors from about the 20th of December to the middle or end of April in each year. The keeper acts as guide also. The time usually occupied in the ascent from the house is from three to four hours for men, and four to six hours for ladies. There are two women's rooms at one end of the house, and two men's at the other, with large common living- and dining-room in the centre. Visitors have now the option of being supplied with meals at a cost of 1s. 6d. each, or they may provide and cook their own food. Horse feeds, 1s. 6d. each; paddocking, 6d. daily, or 2s. 6d. a week. A small charge for use of house is made to visitors of 1s. per night or 5s. per week throughout the visit. In addition to the mountain-house, the Board has during the year past erected a cottage of three rooms, comprising two bedrooms (fitted with four bunks each), and one living room in between. This cottage is intended for renting by the week to family parties, only one such party occupying it at a time, the minimum charge per week being two pounds sterling for a party of four adults; over that number and up to eight (the limit allowed), 7s. 6d. each per week; children over five and under twelve years, half rates. The cottage is not let to any one party for a longer period than two weeks while there are other applicants. The Board provides cooking and other utensils, firewood, and water, also mattresses and pillows; but visitors must take their own blankets, and provide and cook their own food. The caretaker at the mountain-house keeps a small stock of the principal lines of food usually wanted for sale to visitors. The cottage is within 60 or 70 yards of the mountain-house, and in charge of the same caretaker, but parties desirous of renting it should communicate with the Honorary Secretary to Committee for Northern Division of Egmont National Park, New Plymouth, giving dates between which they require it. These applications are booked in order of priority of receipt (after notification that offers will be received, usually in the early part of December). The cottage is opened and closed on same dates as the mountain-house. Guide's fee for mountain, £1 per party. During the past season there were many visitors, remaining various periods of from one or two days to as many weeks. The view from the top is superb, including as it does, volcanic cones of Ruapehu, Ngauruhoe, and Tongariro, the whole of Taranaki, and a considerable portion of Auckland and Wellington Districts, also across Cook Strait to the mountains of Marlborough and

Nelson Districts of the Middle Island. In fine weather, when the snow is off, the mountain can be ascended without risk. A considerable sum has been expended in improving the accommodation at the house during the past season.

The mountain can also easily be ascended from Stratford side, the return journey occupying about thirteen hours, including stoppages. Tourists can ride over the first thirteen miles to the Pembroke Road Mountain-house (three rooms) above the grass-line, altitude 4,325 ft.: time occupied, about three and a half hours. A new two-roomed cottage is now in course of erection, and will be ready for next season. Here the horses are left, and the remaining climb has to be done on foot: time required for fair walker, a good three hours, although, coming down, the distance can be done in two hours. A large number of persons visited the mountain by this route during the season. Good hotel-accommodation, guide, horses, and provisions, can be obtained in Stratford on reasonable terms. The return trip can be varied by visiting Dawson's Falls and Kendle's Cascade, or by a run across to the Egmont Mountain-house.

Another route now coming into favour is from Hawera or Eltham *viâ* Manaia or Kaponga and Dawson's Falls. At the latter place a comfortable shelter-house, capable of accommodating over forty people, has recently been erected, and is known as the Falls Mountain-house (altitude, 2,990 ft.). This house, which is close to the Falls (65 ft.), is within an easy two hours' ride of Kaponga. During the season the house is in charge of a caretaker, and food, horse-feed, and paddocking can be obtained. There were a large number of visitors to Falls and mountain by this route during the season. A comfortable three-roomed cottage is also being erected in connection with this house. Water is obtained from the adjoining creek by means of a ram. From the house to summit of Mount Egmont occupies from four to six hours' climbing at a moderate pace, the time being in accordance with strength and composition of party. From the top the tourist can, instead of returning by same route, drop down to the mountain-house on the north or New Plymouth side of, and 3,000 ft. up, the mountain. The walk would not occupy over two hours, easy walking, or he could go out *viâ* Stratford.

Soils.

The volcanic soil, the boundaries of which have been already described, varies a good deal in quality. The best is believed to be on the south side of the mountain, between Stratford, Hawera, and Opunake, but not less than two or three miles from the forest-reserve boundary. It is thought that the country now being opened to the north and east of the volcanic deposit—that is, the papa and limestone formation—will, from the presence of lime, be much richer and more lasting as pasture-land than that around the mountain. The carrying-capacity of the land is, on an average, two and a half to three sheep to the acre.

Dairying, Grazing, and Agriculture.

Taranaki is essentially a grazing and dairying district, its chief products being butter and cheese.

There are 101 dairy factories, 51 skimming stations, and 1 condensed-milk factory scattered over the district. Of these factories, 87 produce butter only, 11 butter and cheese combined, while 3 produce cheese only. Seventy-six factories and creameries are owned by proprietory companies, while 77 are run on co-operative principles. There are also in this district 16 registered packing-houses for milled butter, 169 registered private dairies for butter-making, and 1 for cheese only, besides many small plants run on individual farms of which no record is obtainable.

In September, 1896, a new work in connection with the dairying and meat industries was started in the shape of the Taranaki Freezing Works. They are situated at Moturoa, near the breakwater, and close alongside the railway-line. Substantial buildings have been erected, and a railway siding laid down. The machinery consists of a "Paxman" compound surface-condensing engine of forty

indicated horse-power, driving a "Livide" compressor, capable of freezing 400 sheep per diem: although up to the present time the company has confined its attention wholly to the freezing of dairy produce. During the year 1900 the output from the works has been—Butter, 166,353 packages, weighing 4,164 tons 7 cwt. 35lb. net; cheese, 21,559 packages, net weight 1,347 tons 8 cwt. 3lb. During the hot season the factories and railway-vans carrying butter have been supplied with ice from the works at a nominal cost.

At the Taranaki Bacon Factory, Fitzroy, substantial buildings have been erected, and a 6-horse-power "Livide" machine fitted up, and the owner, Mr. Drake, has the works in full swing. The pigs are purchased from the farmers in the district and delivered at the styes in connection with the factory, where they are topped off with corn-feeding for fourteen days before being slaughtered. The number of pigs put through during past season was 2,716, weighing 353,000 lb., or an average dead weight of about 130 lb. each; price, 3½d. per pound dead weight. The hams and bacon exhibited by this factory have always taken first-class honours in the various agricultural shows. An industry like this cannot but prove of great assistance to settlers in the district, and should receive their most cordial support.

There are in the Taranaki District 17,812 horses, 211,459 cattle, 508,948 sheep, and 24,444 swine. These figures include all kinds and ages.

Agriculture has not hitherto been carried on to any great extent in this district. The total area under corn-crops and cut for threshing during season 1900–1901 was 6,650 acres; corn- and grass-crops cut for hay, chaff, or ensilage, 11,333 acres; corn- and green-crops for feeding to, or down with, stock, 11,487 acres; sown grasses and clovers for feeding down, 701,859 acres; sown grasses for seed, 3,407 acres; potatoes, 1,368 acres; beet, 4 acres: turnips, 7,279 acres; mangolds, 671 acres; rape, 1,949 acres; carrots, 440 acres; other crops, 52 acres; total area under crops of all kinds, including gardens, orchards, vineyards, 738,011 acres. Plantations, 1,201 acres; fallow, 160 acres.

The average yield of different grain-crops in bushels per acre for season of 1900–1901 was: Wheat, 28·71; oats, 43·37; barley, 38·38; rye, 32·50.

Mining.

The only mining going on at present is at the Mokau Coal-mines, which are situated on the Mokau River, about twenty-one miles from the sea, the river being navigable right up to the mines for vessels of 7 ft. 6 in. draught. The coal is the best class of pitch-brown, and is excellent for household and steam purposes. Eight distinct seams are already known, varying in thickness from 2½ ft. to 8½ ft. The latter, the one now being worked by Mr. Stubbs, is the middle one of the series, and has a horizontal band of slate in it varying in thickness from 3 in. to 10 in. The entrance to the drive is about 40 ft. above the river, and runs some 30 chains into the hill on a very easy upward grade. The roof is hard, and the mine thoroughly dry and well ventilated. Owing to want of shipping the output for past year was only 3,433 tons.

A Sydney syndicate has purchased a considerable area of land on the river, and is now building one or more steamers specially adapted for the trade, and expects to commence coal-mining within the year.

An enterprise like this, if successful, would enrich and give an immense impetus to the trade and importance, not only of the district, but also of the colony generally. Should the efforts now being made be abandoned through lack of capital, it is unlikely that further steps will be taken for many years to further test the value of these deposits, of the existence of which there can be no doubt.

Ironsand is found in great abundance on the seashore from Mokau to Patea, a distance of 130 miles. It produces, when smelted, from 50 to 60 per cent. of iron of the finest quality. The first attempt to smelt this sand was made in 1848, and several trials have been made since, but the heavy cost of production and the absence of capital and modern appliances have, so far, retarded the industry. Strong efforts are now being made to remedy this by the introduction of outside capital, and it is hoped these will shortly be successful.

Climate.

The climate of Taranaki is remarkably healthy, without any extremes of temperature. Below is given a table of mean, maximum, and minimum temperatures in shade for each month of the year ending December, 1900:—

	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Mean temperature	63·6	63	65	65	60·9	57·2	57	56	58	62·5	62	63
Max. temperature	79	82	89	81	87	84	86	73	82	87	88	86
Min. temperature	45	40	43	39	36	36	32	37	36	40	38	44
Number of days on which rain fell ...	13	10	12	22	25	10	24	24	20	26	20	16
Total rainfall per month in inches and decimals ...	0·991	3·190	2·325	6·755	8·670	4·960	5·860	6·935	8·255	6·500	4·485	2·335
Mean barometric reading for the month	30·10	30·13	30·25	30·16	30·094	30·190	29·90	30·04	29·97	29·91	30·06	30·03

The mean barometric reading was 30·0695 in. for the year. Total rainfall, 61·261 in. on 222 days, the maximum fall being 1·850 in. on 8th May. The rainfall varies considerably, as, for instance, at Norfolk Road, three miles south of Inglewood, the rainfall for the year 1899 was 99·82 in. on 181 days; the maximum fall was 4·34 in. on 26th August. The average rainfall at New Plymouth during the past seven years was 63·60 in., and at Norfolk Road for same period 102·56 in.

Chief Towns.

The principal town of the district is New Plymouth (population about 4,400), situate on the seashore, about two miles from and to the north-east of the picturesque rocky islets known as the Sugar Loaves. The general appearance of the town is very attractive, and it abounds in neatly-kept gardens. The Recreation Grounds, from which a good view of Mount Egmont is obtained, form a favourite resort.

New Plymouth is 252 miles by rail from Wellington, the railway running in a northerly direction through the district from Patea to Sentry Hill, where it turns at right-angles westward for eight miles to New Plymouth. From Sentry Hill there is a branch line to Waitara, four miles distant.

The Port of New Plymouth is situated at the Sugar Loaves, two miles from the town. Protection for shipping is afforded by a concrete mole or breakwater running in a north-east direction for a distance of 1,900 ft. Under the lee of this there is wharf-accommodation provided for the coastal trade. Steamers of 1,000 tons can be berthed here in almost all weathers. The wharf is connected with New Plymouth by both rail and road. The breakwater was built at a cost of £200,000, borrowed under security of one-fourth of the land revenue of the Provincial District of Taranaki, and the right to levy a rate over certain lands. The present rate levied is ¼d. in the pound on the capital value. The principal over-sea exports from breakwater for the year (exclusive of all coastal trade) were: Bacon and hams, 976 cwt., value £2,713; butter, 79,082 cwt., value £340,755; cheese, 24,540 cwt., value £51,307; fungus, 1,305 cwt., value £1,918; leather, 170lb., value £4; flax, 14 tons, value £269; grass seeds, 125 cwt., value £177; tallow, 7 tons, value, £142; wool, 43,266 lb., value, £1,058; hides, 1,724, value £1,025; preserved milk, 28,540 lb, value, £479; total value, £503,921. Imports (oversea): value, £67,338. Customs duties for the year, £21,281. During the year 402 steamers entered and left the port: tonnage, 172,957, with crews numbering 8,508. The number of passengers to and from the breakwater by sea, 17,134.

Manufactures in New Plymouth are represented by a sash-and-door, a boot, butter-keg, and three coach factories, a brewery, a cordial, and also a patent-stopper factory, a flour-mill, tannery, fellmongery, bone-mill, and iron-foundry, with freezing-works and bacon-factory in the suburbs. The town has both water and gas laid on.

Hawera, the next largest town, is situate on the eastern edge of the Waimate Plains. The population is stated to be about 2,131, and the town is lit with gas. The Wellington-New Plymouth Railway runs close to it, the distance by rail from

New Plymouth being about forty-eight miles. Hawera is surrounded by a first-class dairying and grazing country, capable of carrying a very large population. On 1st December, 1898, an up-to-date bacon-factory, costing some £1,200, commenced the work of killing and curing in Hawera. During the past season it has put through 537 pigs, the average weight being 125 lb., and price paid 3d. per lb.

The Town of Patea is situated on the coast, at the extreme southern end of the district, and has a population of about 691. There is a splendid grazing district inland, with a large area of land yet to be opened up. The principal industry is the boiling-down and canning of meat, and the Western Packing and Canning Company during the past season slaughtered 8,469 sheep, averaging 57 lb. each, and 660 head of cattle, averaging 597 lb. each, the output being 39,000 cases of tinned meats, 360 casks of tallow, 300 tons manure, 70 gallons neatsfoot oil, 20 casks sausage casings, 8 sacks of hair, and 20 sacks horns. There is also a dairy factory, which has two branch creameries in the country. A bacon-factory has also been established. Exports for 1900 were: Wool, 4,799 bales; fungus, 602 bags; tallow, 677 casks; pelts, 210 casks; loose hides, 4,766; corn, 8 sacks; grass-seed, 1,308 sacks; cheese, 1,798 cases; cheese and butter, 938 cases; flax, 413 bales; meat, 4,483 cases; cattle, 84; sheep, 122; bonedust, 1,576 tons; potatoes, 73 sacks; bones and horns, 17 bags; sundries, 262 packages; bacon, 216 cases; empties, 1,268; runners, 44; pigs feet, 26 bags; transhipment, 95 tons; total value, £83,927. Imports: Ordinary, 7,990 tons; coals, 1,091 tons. The total expenditure on guide pier to 31st December, 1900, is £5,022 9s. 10d., while that on wharf extension amounts to £2,033 10s. 2d., and further improvements are contemplated. The Harbour Board is in a flourishing condition, and shows a credit balance on revenue and expenditure account of £840. Wharfages amounted to £1,658, dumping dues £390, tonnage dues £292. The number of steamers in and out were 166. The exports for the year show a considerable decrease, but the imports were the largest in the history of the port. The Harbour Board has an up-to-date wool-dumping press and hydraulic pumps. The width between the east and west pier-heads is 260 ft.; width of channel about 180 ft., gradually narrowing to 100 ft. as the beacons are approached. The pilot reports the depth of water at not less than 12 ft. at high-water springs, and 9 ft. at high-water neaps, with a straight channel.

Stratford, a comparatively young town, lies about midway between Patea and New Plymouth. It has already a population of about 2,027, and is growing fast. The height above sea-level is 1,000 ft., and the climate is bracing though somewhat moist. The main road to Auckland—known as the Stratford-Ongaruhe (now Ohura Road)—starts here. It has been formed as a cart-road for fifty-six miles, and as a bridle-road to sixty-one miles. If the work is continued energetically, communication with Auckland should be opened up in about three years' time. A commencement has been made with the construction of the railway line between Stratford and Auckland *vid* Kawakawa, and the works are being pushed on vigorously. A bacon-factory has just been started at Stratford under very favourable circumstances, and is likely to prove a public benefit, and also a financial success to the proprietary company. The works are on a fair scale and up to date. The machinery is driven by a 30-horse-power Victor turbine, the power being obtained from the Patea River through a tunnel 865 ft. long, cut across a bend in the river. The refrigerating engine is a 6-ton British Linde, while hot water is supplied from a high-pressure boiler in an adjoining building. The chilling-chamber holds about 120 carcases (or one day's killing); here they remain overnight, and are then passed on to the curing-room, a spacious compartment of 80 ft. by 26 ft., capable of holding 1,000 carcases; from here they pass to the drying-room, of same size and capacity, on the upper story. A brick smoke-house, capable of dealing with 600 pieces at a time, has also been erected. The piggeries and slaughter-house are about a mile from the works, and are connected by tramway; the former consists of twenty compartments holding ten pigs each, and are conveniently arranged for feeding, &c., the output during the past season being 3,213 pigs. On the Eltham-Opunake Road another factory, called the "Pioneer Bacon Factory," was started by Mr. Buchanan in 1897, putting through last year 1,463 pigs; average weight, 130 lb.; price given, about 3½d. per lb.

Waitara, a seaport town of 760 inhabitants, is situated on the river of the same name, a mile up from the sea, and about ten miles north-east from New Plymouth. The Mount Egmont Freezing-works have passed into the hands of a new company, styled the "Waitara Freezing and Cool Storage Company, Limited," who have rebuilt and greatly enlarged the works, the storage capacity now being for 25,000 carcases of mutton, together with five freezing rooms, capable of hanging 1,200 carcases, also a beef-chilling room and a mutton-chilling room. Provision is made at the slaughterhouse for accommodation of fourteen mutton and three beef butchers. The freezing-plant is a 60-ton Hercules, and is guaranteed to freeze 1,500 sheep per day. The boiling-down and tallow department is most complete and up-to-date, and a large manure plant is now in course of erection. The works are fitted throughout with electric light. The following produce was dealt with during the year: 24,697 quarters of beef, 9,234 carcases of mutton, 12,734 carcases of lamb, 669 pigs, 1,746 pieces of mutton. All produce is conveyed on board the New Zealand Shipping Company's ocean-going steamers (which anchor in Waitara roadstead) in specially constructed and insulated bags. These works are gazetted as Government grading and cool stores, which is a great convenience for outside dairy factories, as it avoids risk of injury to their produce after it has been graded. The exports from the port for the year 1900 were: Wool, 2,591 bales; grain, 18 tons; grass-seed, 4,421 sacks; hides, 4,306; skins, 46 bundles; timber, 62,656 super feet; flour, 20½ tons; potatoes, 433 sacks, chaff, 218 sacks; tallow, 849 casks; pelts, 98 casks; cattle, 98 head; horses, 13; sheep, 124; pigs, 49; frozen meat, 2,468¾ tons; butter, 186 boxes; general cargo, 427¼ tons. Total tonnage of exports for year was 10,446 tons. Imports for same period were: Grain, 375¼ tons; potatoes, 1 ton; manure, 239 tons; lime, 164¼ tons; timber, 364,205 super. feet; coal, 3,395½ tons; wool, 225 bales; fungus, 14 bales; hides, 32; skins, 38 bundles; flour, 1,310 tons; horses, 1; sheep, 127; posts, 1,584; butter, 83 boxes; cattle, 43; general cargo, 4,068¼ tons. Total tonnage of imports, 4,593 tons; making in all a gross total of 15,039 tons of cargo handled at the port during the year. 179 steamers and sailing vessels, gross tonnage 44,633, entered and cleared during the year, the crews numbering 1,957. Besides these nine large ocean-going steamers anchored in the roadstead, and took in cargo for London.

Inglewood, situated on the railway-line, sixteen miles south-east of New Plymouth, is a flourishing little town of some 719 inhabitants, rapidly coming to the front. Last season a bacon-factory was started, and during the year has put through 2,205 pigs; average dead weight, 138 lb.; price given, 3¼d. per lb. The factory is worked by a 24 in. turbine, the water being conveyed in a race 10 chains long. It is provided with a four-horse-power tubular boiler, a Lard jacket, and Californian pump. There is also a size D ammonia refrigerating machine.

The only other towns of importance are Eltham and suburbs, population, 800; Opunake, population, 466; Manaia, population, 447; and Normanby, population, 370.

Roads and Railways.

The chief means of communication is the railway from Wellington, which traverses the district between Patea and New Plymouth—a distance of sixty-six miles. Trains run every day between New Plymouth and Palmerston North—164 miles—and on Mondays, Tuesdays, Thursdays, and Fridays there are through trains between New Plymouth and Wellington—252 miles. The Main North Road runs from New Plymouth, passing through the Towns of Waitara and Urenui; and is formed as a cart-road to Mokau, the northern boundary of the district. All the streams are bridged with the exception of the Tongaporutu River (the contract for a bridge over which has, however, now been let), and the Mokau River, on which is a good ferry. From Mokau there is a dray-road right through to Te Kuiti, on the Auckland railway system. About midway between New Plymouth and Waitara on the above road the Mountain Road diverges and runs almost due south, and chiefly along the railway, for a distance of forty miles, connecting with the Main South Road at the Town of Hawera. This is at present the principal road in the

district, tapping, as it does, large numbers of district roads, and passing through the Towns of Inglewood, Midhurst, Stratford, Eltham, Normanby, and Hawera.

The Ohura Road branches from the Mountain Road at Stratford. It is formed and open for traffic as a dray-road for fifty-six miles from Stratford and for horse-traffic to sixty-one miles. A coach runs in summer time every Tuesday and Friday (returning on following days) between Stratford and Whangamomona Village, a distance of forty-one miles, fare, 12s. 6d. each way; and the road is now being extended into the interior so as eventually to connect with Auckland, and will open up a large area of fertile country.

The Main South Road from New Plymouth follows the trend of the coast to the south, and was at one time the coach-road to Wellington. It passes through the Villages of Omata, Oakura, Okato, Rahotu, Otakeho, Manutahi South, and Kakaramea, and the Towns of Opunake, Manaia, Hawera, and Patea.

The Junction Road runs south-east from New Plymouth, and crosses the Mountain Road and railway at Inglewood, thirteen miles out; it is metalled for thirty-five miles, formed as a dray-road to forty-five miles, thence as a bridle-road to forty-nine miles, where it connects with the Ohura Road at a distance of thirty miles from Stratford. This road crosses a number of district roads; hence its name.

The Opunake Road runs from Stratford to Opunake, twenty-six miles, skirting the southern base of Mount Egmont. It is formed and metalled for twelve miles from Stratford; the remainder is open for horse-traffic only. Vehicular traffic turns down the Manaia Road to Kaponga, thence along the Eltham–Opunake Road to the latter place. This route is metalled throughout.

The Eltham Road runs from Eltham to Opunake, twenty-five miles, connecting with the Opunake Road at Punehu, seven miles from Opunake. This is formed and metalled throughout.

The other main roads in course of construction are the Rawhitiroa Road, leaving the Mountain Road near Eltham; the Otaraoa, Moki, and Okoke Roads.

Crown Lands available for Settlement.

	Acres.
Native lands undealt with	270,250
Crown lands available for settlement (as per annual returns)	500,000
Total	770,250

Of the above, about 150,000 acres are open valleys and hills in the north-east corner of the district; a good deal of it more or less pumice-land, but still suitable for grazing. From the rest may be subtracted perhaps 10,000 acres for area absorbed by rivers, gorges, &c., and there remain 610,250 acres of forest-land yet to be dealt with. Of this area perhaps 50,000 acres, made up of strips of flats and terraces, may be suitable for agriculture; while the balance—560,250 acres—will be good pastoral land.

It may be said, in conclusion, that there is every sign of genuine prosperity throughout the district, which has advanced rapidly during the last few years, and will no doubt continue to do so.

THE HAWKE'S BAY LAND DISTRICT.

E. C. Gold-Smith, Chief Surveyor.

The Land District of Hawke's Bay comprises that portion of the east coast of the North Island from Cape Turnagain, in latitude 40° 30′, northwards to Lottin Point, about thirty miles beyond the East Cape, and contains the Waiapu, Cook, Wairoa, Hawke's Bay, Waipawa, and Patangata Counties.

It has a seaboard of 300 miles, with an average depth from the coast of forty-five miles, and embraces an area of 6,063,000 acres. Its western limit is defined by the Ruahine, Kaweka, Ahimanawa, Raukumara, and other high ranges that form the watershed between the rivers flowing through it to the sea, and those that run to the west coast and the Bay of Plenty.

Physical Features.

The Ruahine Range extends northwards for about sixty miles from the Manawatu Gorge as far as the valley of the Ngaruroro River. Its altitude varies from 3,000 ft. to 6,000 ft., and for a considerable distance its summit is snow-clad during the winter months.

The Kaweka, a shorter range, divided from the Ruahine by the Ngaruroro River, attains an altitude of 5,650 ft., is very rugged and steep, and a prominent feature in the landscape in winter, covered as it then is with snow.

From these two ranges, which fall very abruptly on the Hawke's Bay side, the land slopes gradually to the sea, forming in some parts fine rolling hills—the essence of a sheep-country—in others extensive plains, with comparatively little poor soil.

Northwards from the Kaweka there is a series of forest-clad ranges of varying height, stretching away in the direction of the East Cape. Hikurangi, the highest point, is a bold peak with an elevation of 5,606 ft., rising so abruptly on all sides that the ascent can be made only at one point, and that with difficulty.

The only lake in the district of any extent is Waikaremoana, so famous for its magnificent scenery. It lies about thirty-five miles inland of the Wairoa (Clyde), and is eleven miles in length, with a breadth at the widest part of about eight miles. Nestled among precipitous mountain-ranges, wooded to the water's edge, with numerous bays and inlets, it has a natural beauty hardly to be surpassed.

From Wairoa there is a formed road to the lake, and twenty-five miles round it, as far as the Oporuahine River.

The principal plains are: (1.) The Ruataniwha, some fifty miles south of Napier. This is 120 square miles in extent, is for the most part occupied as sheep-runs, and carries a large quantity of stock. (2.) The Heretaunga Plain, with an area of ninety square miles, lying immediately to the south of Napier. This is rich alluvial land; a large portion is thickly settled, the remainder used for grazing and agriculture. The only other plain of any extent is at Poverty Bay. It has an area of sixty-five square miles, is very fertile, well cultivated, and bears a large population.

The land district is well watered throughout by numerous rivers and streams, but none are navigable except the Wairoa and Turanganui, and these only for vessels of light draught. They are both tidal, and serve as ports to the Towns of Wairoa (Clyde) and Gisborne.

Communication.

The chief outlets from Napier are three in number. First the Napier-Wellington Railway, which traverses the centre of the southern half of the district for its whole length of 100 miles, and may be called the main artery of communication. Parallel to it throughout runs an excellent gravelled road, which was made before the construction of the railway. On either side there are numerous branch roads, which act as feeders, making a very complete system of internal transit. Another main road runs in a westerly direction to Kuripapanga, distant forty-five miles, a favourite resort in the summer time, removed as it is from the heat of the country near the coast. A coach runs thither twice a week, and on thence to Inland Patea, where the Napier Road meets the roads to Hunterville, Tokaanu, and the Wanganui River.

The part of the district served by these two main lines—viz., that between Napier and Woodville—contains the greater portion of the population, and from the extent of arable land within it is likely in the future to be very thickly peopled. Notwithstanding that so much of the Native land in this part is unoccupied and in its natural state, there are nearly a million of acres of land in sown grasses, carrying 2,750,000 sheep and 80,000 cattle, and the population, inclusive of towns and villages, is about 36,000 persons.

The only main road northwards from Napier is the coach route to Taupo, which, soon after leaving the fertile Petane Valley, begins to traverse poor country, and twenty-five miles out enters the light pumice soil.

From Napier to the Wairoa the journey must be done on horseback, as there is a break of twenty-three miles between Tutira and Mohaka unfit for wheeled traffic;

but this is being gradually remedied, the road being completed with the exception of bridges at Waikare and Matahourua Streams, where fords, however, have been made, so that the coach can travel through except after heavy rains. Until these bridges are erected the heavy traffic between these two places has to be done by small steamer.

From the Wairoa a main road runs northward, through the Village of Tiniroto and on to Gisborne, a distance of seventy-five miles. For a considerable distance it runs through hilly country, and, as it has not been gravelled, wheeled traffic is suspended during the winter months; but a coach runs weekly for nine or ten months out of the year. The road from Wairoa to Gisborne *viâ* Nuhaka Hot Springs is now completed and open for wheeled traffic.

Between Gisborne and Opotiki, in the Bay of Plenty, communication is not good. The road, which is 120 miles in length, has been formed only to the edge of the Motu Forest, a distance of fifty miles. In the neighbourhood of the forest a large area of Crown lands has been taken up and settled in the last few years. The rest of the journey must be done on horseback. A railway, however, is being constructed, eight miles being completed.

In the country north of Gisborne, formed roads for wheeled traffic are few in number, and not continuous; but small steamers trade regularly along the coast, calling in at Tolago and Tokomaru Bays, Waipiro, Tuparoa, Awanui, Kawakawa, and other small bays.

Pastoral Industries.

The Hawke's Bay Land District is pre-eminently a sheep-grazing country. The extent of land in sown grasses was, in October, 1900, no less than 2,851,854 acres, while 2,001,996 acres were in tussock or native grass. In April of that year there were 4,503,556 sheep, 146,006 cattle, and 27,654 horses. The value of the wool exported from the district during the twelve months ending 31st March, 1901, was £797,884, and the quantity 31,134,496 lb.

Freezing-works are now established at Tomoana, Port Ahuriri, and Gisborne, and the export of frozen meat for the year ending 31st March, 1900, was 309,805 cwt., the value being £334,657. This industry gives employment to a large number of persons, both directly to those engaged in breeding, shearing, freezing, and shipping, and indirectly to those who labour at bushfelling, grass-seed sowing, fencing, and otherwise opening up new country. Nor must the cutting of the immense amount of firewood consumed at the works be forgotten. All this benefits the settler with limited means, by providing him with funds to improve his holding, and to this is due, in a great measure, the general prosperity.

Agricultural Pursuits.

Agriculture is not carried on to the extent it might be with so much land suitable for root- and grain-crops. No doubt this is due to the profits made in sheep-farming. It is chiefly confined to the Heretaunga Plains and the flat lands near Gisborne. The soil is favourable to root-crops; potatoes range from 12 to 15 tons to the acre, and in some instances exceed this amount. Only a moderate quantity of grain is grown; barley, for which the soil seems well adapted, returning from 20 to 60 bushels of good sample to the acre.

Dairying.

Settlers are now turning their attention to dairying, and factories have been established in the bush districts at Norsewood, Ormondville, Maharahara, and Woodville, whilst several others are in contemplation. At the last-mentioned town a cheese-factory has been in existence for some years, and turns out an excellent article much sought after in other parts of the colony.

Timber Industry.

The timber industry is considerable, numerous sawmills being in full work in different parts of the district. In the forest between Takapau and Woodville there are twelve, with an estimated yearly output of 10,000,000 ft. This tract of forest is

the one most used for milling purposes, and will yield a plentiful supply for a long time to come, notwithstanding that for years past a large amount of totara timber has been taken out of it to send to other parts of the colony. Further north there is no totara to speak of, though rimu, white-pine, and other milling timbers are to be found scattered throughout the forests, and in the Poverty Bay District puriri is found in some quantity. There were 2,534,696 superficial feet of timber, value £8,591, exported from Napier during the year ending 31st March, 1901.

Other Industries.

Other industries, such as fellmongeries, soap-works, boot, coach, and sash-and-door factories, &c., are established in the principal towns.

Climate.

The climate is generally of a mild character, and, though hot along the coast-lands in the height of summer, it is, owing to the dryness of the atmosphere, not so relaxing as in parts of the island farther north. The rainfall is light, excepting in the bush districts and high inland country.

Napier itself is recommended by many medical men as a resort for invalids suffering from pulmonary complaints, chiefly on account of the mildness of its winter season. During the year ending 31st December, 1898, rain fell only on eighty-one days, the total fall recorded being 35 in., while the average rainfall for the last thirty-three years is 37·070 in.

Towns.

Napier is pleasantly situated on the peninsula known as Scinde Island, which is joined to the mainland by a narrow shingle-bank several miles in length. It is a busy town, with a population of 8,774. The business part is on the flat land at the foot of the group of hills that take up the greater part of the peninsula. These hills, formerly barren and waste, are now occupied by numerous private residences, and the very general tree-planting has given the upper town a distinctive and pleasing character. There is an excellent water-supply, derived wholly from artesian wells of large size, and pumped by machinery to reservoirs on the tops of the hills. The shipping trade, as the large exports show, is especially active during the wool and frozen-meat season. It is still carried on at Port Ahuriri, about a mile from the town; but has recently, in a large measure, been transferred to the fine breakwater which is now almost completed. During the year ending 31st December, 1900, the imports amounted to £209,418, and the exports to £770,159.

Gisborne, the trade-centre and port of what is known as the Poverty Bay District, is a prosperous town of about 2,700 inhabitants, rapidly increasing in size and importance, as the large quantity of unimproved land in the Cook County is fast becoming settled and made productive. There are 861,143 sheep now in Cook County, and Gisborne's exports amounted to £450,125 in 1900.

Clyde, the county town and port of the Wairoa County, is picturesquely situated on the Wairoa River, about three miles from the mouth. The river is navigable for small craft as far as the village of Frasertown, twelve miles further up.

With a few exceptions, the towns and villages to the south of Napier are all situated on the line of railway running from that city to Palmerston North. The principal are: Hastings, a rising town of 3,650 inhabitants, Waipawa, Waipukurau, Dannevirke, and finally Woodville, about three miles from the Manawatu Gorge, and distant ninety-eight miles from Napier. It is at this end of the district that the Crown has, in the last few years, successfully planted settlement, and, in place of the continuous forest known as the Seventy-mile Bush of earlier days, there are now prosperous townships, with various thriving industries established.

Crown Lands.

The land held by tenants of the Crown, of whom there are 858 in the district, under the various systems of tenure, amounts to 563,552 acres, and there remain about 340,000 acres not yet dealt with in any manner.

The latter is, for the most part, suitable for pastoral purposes only, any fit for agriculture lying in small, isolated spots, widely scattered, and such as could not be selected independently of the surrounding inferior land. Nearly the whole is broken forest country, fitted more for sheep than cattle, and having an average carrying-capacity, when cleared, of about one sheep to the acre, though the best of it might possibly graze from two to three. The land is chiefly in the Hangaroa, Koranga, Mangatoro, Norsewood, and Motu Districts, and the back-country of the Waiapu County.

About 10,392 acres are now open for selection, in addition to small grazing-runs to the extent of over 31,000 acres.

The following is a short description of some of the areas to be dealt with in the future :—

Waitahaia Block, Waiapu County.—18,528 acres. Nearly all forest country, with soil varying from light to good.

Mata Survey District.—1,756 acres, being the Aorangiwai No. 1 Block ; broken forest country ; soil fair.

Tutamoe Survey District.—7,750 acres, being the Huiarua No. 1 and Tutamoe Blocks ; all bush, broken, soil medium. Situated about thirty miles from Tokomaru.

Urutawa Survey District.—16,030 acres, being the Whitikau No. 1 and Whakapaupakihi Blocks. Broken forest country, soil fair.

Koranga and Ngatapa Survey Districts.—About 42,684 acres, being part of the Tahora No. 2 Block, situated north of Waipaoa and Ruakituri Rivers, and between them and the Koranga River. It comprises some very hilly country, but, though nearly all the land is covered with bush or scrub, there is some fair soil, and would make fair pastoral country. All well watered. North of this portion the Crown has some 70,000 acres in the Auckland Land District, west of the Waioeka River.

Motu Survey District.—47,100 acres, being the Motu Block. Part undulating country, rest broken. One-third open fern and scrub, remainder forest clad. Soil light. About thirty miles from Gisborne, along the Opotiki Road.

Patoka Survey District.—4,028 acres, chiefly forest country, with light soil. Part river-bed.

Puketapu Survey District.—320 acres, in Block I. Waste land, north of the Pokopoko Stream, and west of Sections 16 to 20. Chiefly gullies.

Waikaremoana and Tuahu Survey Districts.—23,979 acres, being the Waipaoa, Ruakituri, and Taramarama Blocks. Mostly forest, with scrub and open country in parts. Hilly, but fair soil.

Tahoraite and Norsewood Districts.—About 7,366 acres, being the Tamaki No. 1 Block. Bush country, all covered with heavy forest. A good proportion undulating land. All well watered. It will probably be some time before this block is opened for selection.

Tahoraite and Mangatoro Survey Districts.—Mangatoro Block, about 19,000 acres. Now under survey.

Norsewood Survey District.—Piripiri Block, 17,056 acres. Part of this block is in the Wellington Land District. It will probably be some time before this block is in the market.

In addition to the foregoing, there is an area of 17,345 acres, principally small blocks scattered over various districts, as follows : Mata, 1,074 acres ; Hikurangi, 1,931 acres ; Tokomaru, 216 acres ; Waingaromia, 4,522 acres ; Uawa, 372 acres ; Hangaroa, 4,036 acres ; Waiapu, 798 acres ; Matakaoa, 145 acres ; Opoiti, 3,676 acres ; and Nuhaka North, 575 acres.

Native Lands.

Of the Native lands in this district, a very considerable portion has been leased to Europeans, but there still remains in the hands of the Maoris a valuable estate, comprising both agricultural and pastoral country, and including some 800,000 acres of excellent land. This land lies for the most part in the Waiapu County, towards the East Cape.

THE WELLINGTON LAND DISTRICT.

J. W. A. MARCHANT, Chief Surveyor.

The Wellington Land District is bounded on the north by the Districts of Auckland and Hawke's Bay, on the west by that of Taranaki, on the east by the sea, and on the south and south-west by Cook Strait. The area contained within these limits is about 6,810,958 acres. It lies between the parallels of 39° and 41° 30′ south latitude; its greatest length north and south is about 180 miles, and its mean width east and west about sixty miles.

General Physical Features.

The district is divided into two well-defined parts by a mountain range, which forms part of the backbone of the North Island. At its northern end this range—there known by the name of Ruahine, and averaging a height of about 4,000 ft.—divides Wellington from Hawke's Bay; but after passing the point where it is intersected by the Manawatu River, the range takes the name of Tararua for many miles, until, at about forty miles from the termination on the shores of Cook Strait, it divides into two main ranges, known respectively under the general names of Rimutaka and Tararua, both ranges averaging from 2,500 ft. to 3,500 ft. in height, the highest point being Mitre Peak, 5,154 ft. Parallel to the main range, and divided from it by the Wairarapa Plain and the undulating country to the north, is a series of ranges at a few miles inland from the East Coast, known as the Puketoi, Taipo, Maungaraki, and Haurangi Ranges. Lying on the northern border of the district are the Kaimanawa Ranges, offshoots from the Ruahine. They are for the most part open and grass-covered, rising to a mean height of about 4,500 ft. Westward from the latter mountains, and divided from them by a deep, broad valley, in which flow the Waikato and Wanganui Rivers, is the volcanic chain of mountains containing Ruapehu, 9,008 ft., and Ngauruhoe, an active volcano, 7,515 ft. high. The long sweeping curve of Cook Strait, forming the south-western limit of the district, is bordered, from the Patea River to within thirty miles of Wellington, by a comparatively level and undulating country, now nearly all under cultivation, having an average width of about fifteen miles. This is one of the finest parts of the colony, and is celebrated for its stock-raising capabilities. It was originally in a great measure open, though the southern part, where the plain is narrowed in between the sea and the Tararua Range, has a good deal of forest on it, now fast disappearing under the axe of the settler.

Inland of this coastal plain, at varying distances from the sea, the country gradually rises to a mean height of about 1,500 ft. to 1,800 ft., and becomes a good deal broken in character. It was originally forest-clad almost throughout. It is much cut up by rivers and streams flowing from the interior to the sea, of which the principal, commencing from the north, are these: The Waitotara, the Wanganui, the Wangaehu, the Rangitikei, the Oroua, the Pohangina, and the Manawatu, which last, after leaving the gorge in the Ruahine Ranges, runs through level land to its mouth in Cook Strait. This broken country, being everywhere composed of papa, or marly formation, which takes grass excellently, promises in the near future to be a large sheep-carrying district.

At about fifteen miles south of the volcanic peaks of Ruapehu Mountain the papa country terminates in a fairly well-marked escarpment, giving place to a more level and undulating country formed of volcanic matter, the greater portion of which is forest-clad, though on the south-east, east, and west sides of that mountain there are open grassy plains, of no great fertility, but yet suited to pastoral pursuits.

To the eastward of the main range formed by the Rimutaka and Tararua Ranges is the great depression known at its southern end as the Wairarapa Plain, which gradually rises northwards from the lake of that name into wooded, somewhat broken country, of no great height, at a distance of some forty-five miles from the sea. From here the country falls again slightly to the Upper Manawatu River, the depression in this part being marked by the extensive flats in the neighbourhood of Pahiatua, and by the shallow valleys of the Mangahao, Mangatainoko, and Tiraumea Rivers and their branches. For thirty miles from the sea this great valley is

mostly open, with patches of forest here and there, but becomes more plentifully wooded at the base of the Rimutaka and Tararua Ranges. The quality of the soil varies from light and stony, on the Wairarapa Plains proper, to rich papa country, as the northern end is approached. The southern end of this country is watered by the Ruamahanga River and its tributaries. Generally the district is a pastoral one, though agriculture is also pursued successfully. The neighbourhood of the Puketoi Ranges is in many places composed of limestone, and promises in the future to become a very rich pastoral district, such as will carry a considerable population. In the forks formed by the Tararua and Rimutaka Ranges the Hutt River takes its rise, and runs in a southerly direction through an undulating or level country, finally falling into Port Nicholson. The valley contains some very fine land, generally held in small holdings.

Plains.

The two most important of these have already been mentioned. On the eastern side of the main range the Wairarapa extends northward from the lake of that name for about forty-seven miles, with an average width of about nine miles. In some parts, especially on the flats along the Ruamahanga River, the soil is alluvial and rich; in others, though stony and unfit for cultivation, it is nevertheless grassed, and carries stock well in the winter and rainy seasons. The plain is watered by the Waiohine, Waingawa, and Ruamahanga Rivers, and contains altogether about 200,000 acres, much of which is good agricultural land. On the other side of the district, west of the Tararua and Ruahine Ranges, there is a large block of land so nearly level that it may be called a plain, extending from Paikakariki (thirty miles from Wellington) to Marton (a few miles north of the Rangitikei River), and contains about half a million acres. Starting as a narrow strip between the hills and the sea, the plain widens out by degrees until at Fielding it is at least twenty miles in breadth. Along the beach runs a fringe of sandhills, but behind this is to be found some of the best farming and grazing land in the colony. There are two plains inland—Murimotu and Waimarino—both lying some 2,200 ft. above sea-level, in the neighbourhood of Mount Ruapehu, the former to the south and the latter to the north-west of the mountain. The soil is covered with a coarse native tussock, and, though capable of carrying stock, is of a light porous nature, and cannot be classed as agricultural land.

Rivers.

First among these is the Wanganui—"the Rhine of New Zealand"—with a length of over 110 miles from its source, near Mount Tongariro, to its outlet. The Rangitikei, the next in size, rises in the Ruahine Mountains, and flows through the Awarua country, where it is joined by the Hautapu and other large tributaries. After a course of over a hundred miles it reaches the sea some little distance below the Township of Bulls, on the West Coast. The Manawatu is third in importance. Rising in the Ruahine Range, it flows through the picturesque Manawatu Gorge, joining the sea at the port of Foxton. Lesser rivers on the West Coast are the Waitotara (north of Wanganui), the Wangaehu (which takes its rise in Mount Ruapehu, and from its source to its mouth is so strongly impregnated with sulphur that fish cannot live in it), the Turakina, and the Otaki. The only other rivers of any size are the Hutt (Heretaunga), emptying itself into the Wellington Harbour, the Ruamahanga, flowing through the Wairarapa Valley and lakes into Palliser Bay, and on the East Coast the Pahaoa, Aohanga, and Akitio.

Lakes.

The only lake of any size in the Wellington District is the Wairarapa, lying between the Rimutaka and Haurangi Ranges, towards the southern end of the Wairarapa Valley. It is about twelve miles long and four broad, and is connected by the Ruamahanga River with Onoke, a small lake separated from Palliser Bay by a narrow shingle spit only. A passage through the spit is opened from time to time when the lake rises above its natural level and overflows the low-lying flats along its margin. Water-fowl of every kind—among them numbers of black swans—are to be found round about these lakes.

Scenery.

The views obtained from the railway-line in the ascent and descent of the Rimutaka Range are among the best in the neighbourhood of Wellington, and the road through the Forty-mile Bush was long considered one of the most beautiful drives in the North Island; but much of its pristine beauty has been destroyed by the felling of the bush consequent on the increase of settlement. The same may be said of the Manawatu Gorge, famed in the old coaching days for its lovely scenery, but now sadly marred by the construction of the railway-line. The most beautiful drive now left is through the Awarua Bush, from Ohingaiti to Moawhango. From this road, as it winds round the spurs, most charming glimpses are obtained of the Rangitikei River and the blue hills beyond, and at other points the traveller looks up deep ravines where the graceful fern-tree stands out in bright relief against the dark green of the native bush. Another road from Pipiriki, on the Wanganui River, to the Murimotu Plain, traverses one of the most magnificent forests in the North Island. Here the bushman's axe has felled only the timber standing on the road-line, and the track runs beneath the shade of the largest and stateliest maire and rimu known. Beautiful as these drives are, the scenery on the Wanganui River is still more lovely. A few miles below Taumaranui the river enters a series of gorges, shut in by high precipitous cliffs. Sometimes the canoe glides slowly through quiet reaches, sometimes shoots rapids which make the traveller hold his breath till they are passed, and then again traverses places where the water is ever in turmoil, boiling and eddying in whirlpools, taxing the energies of the most skilful Native steersman, and testing the nerve of the most courageous tourist. These experiences, with the views obtained of the banks, densely wooded even where the papa rock rises almost straight from the water's edge, make the eighty miles journey from Taumaranui to Pipiriki an event not easily effaced from the memory. Between Pipiriki and Wanganui excellent steamers are now running, so that the beauties of the lower part of the river may be seen by all without trouble or discomfort.

Forests.

The Wellington District is essentially a forest country, for out of the 6,810,958 acres contained within its borders about 3,000,000 are still under bush. By far the largest forest is the Waimarino, having an area of at least three-quarter million acres, a large portion of it being nearly level land, containing magnificent timber, principally totara, maire, matai, rimu, and other pines. This forest is as yet hardly touched, though timber is being cut at Raetihi for the settlers now making their homes in the neighbourhood. The distance from the settled districts or any port will render the timber in this part useless as a marketable commodity until the country is opened up by the proposed Auckland Main Trunk Railway.

The next in size is the Rangitikei-Hautapu Forest, containing an area of about 350,000 acres, a considerable portion in the Awarua Block being first-class milling timber, which will be available as soon as the extension of the Hunterville Railway-line taps it. Between this and the Waimarino Forest there is a large extent of bush-land, drained by the Turakina, Mangamahu, and Wangaehu Rivers, extending up to the Wanganui River, and containing about 300,000 acres. Very little of this, from its inaccessibility, will be utilised for sawmilling purposes, but a great deal of it, together with a further block of 230,000 acres on the west side of the Wanganui River, will be cleared by the settlers and sown down with grass. A further block of about 100,000 acres of forest-land lies in the Pohangina Valley and on the slopes of the Ruahine Range. A large portion of this has been taken up and is now being settled.

The forest-land on the West Coast extends from Pukerua to the Manawatu Gorge, on the west side of the Tararua Range, and contains an area of about 300,000 acres, the bulk of it being fit only for turning into pasture. The most available part of it, alongside the Wellington–Manawatu Railway, is being extensively cut into by sawmillers at Levin and other places on the line.

After this in size is the forest on the eastern slopes of the Tararua Ranges, extending from Featherston to the Manawatu Gorge, which includes what remains

of the well-known Forty-mile Bush, containing probably about 175,000 acres. Portion of this area is being quickly denuded of timber by the sawmills established at Pahiatua, Newman, Hukanui, Eketahuna, and by settlers. A tract of about 50,000 acres lying to the east of the Puketoi Range cannot be utilised for milling purposes, as it is not tapped by any branch railway-line, and its distance from the main line would probably render the business unprofitable except for local purposes. Nor are there any suitable ports along the coast where timber could be shipped.

The other forests are, one near Lake Taupo, and the Haurangi Forest on the east side of the Wairarapa Lake. These consist for the most part of birch-covered hills, and cannot be considered as valuable for milling purposes..

Soil.

It may be said that the Wellington Land District contains within its borders a greater quantity of good land than any other in the North Island, very little, except the mountain-tops, being unfitted for use, while some of it is of very superior quality, suited for the growth of the productions of every temperate climate. As much of it is still forest-clad, settlers must look forward to having to make their farms by felling and burning the bush before grass can be sown, and, as it takes from ten to fifteen years before the plough can be used in bush-land, grazing, for which the climate and soil is admirably adapted, will be the principal industry for some time to come. It is generally calculated that the cost of felling and burning ordinary bush varies from 25s. to 35s. an acre. To this must be added about 20s. for seed and fencing. It is no uncommon thing for a return to be received at from twelve to eighteen months after felling. The usual practice is to put sheep on to the new lands soon after the grass has obtained a good hold. The process of improving the lands by the gradual "logging up" and burning of the fallen tree-trunks is a long one, but it pays in the end, for in this way fine pasture-lands are obtained on the hills, and agricultural lands on the flats.

Climate.

The climate of Wellington District is healthy and mild, the mean annual temperature (in the city) being 55·4, whilst the mean rainfall is 48·49 in. per annum. The rainfall differs, however, according to locality. Inland and near the ranges it is much greater. The top of Ruapehu Mountain is covered with perpetual snow, which lies also on the tops of Kaimanawa, Ruahine, and Tararua in the winter. Frosts are heavy in the interior.

Harbours and Ports.

The coasts of Wellington are not so well supplied in this respect as are some other parts of the colony; but what is lost in number is made up in a great measure by the excellence of the chief haven—Port Nicholson—which, from the position it occupies, at the meeting-point, as it were, of the coastal traffic of both Islands, and from its sheltered position and depth of water, may be considered one of the most convenient harbours in the world. The Wanganui River, which has been considerably improved by artificial means, is the second port in the district, and has a considerable trade carried on by coastal steamers. Patea and Manawatu Rivers are also used by coastal steamers, whilst several other places along the shore afford shelter and stopping-places, according to the direction of the wind. The extension of railways along both coasts has, in a large measure, done away with the inconveniences arising from want of harbours.

Towns.

The capital of the colony—Wellington—is situated in the south-west angle of Port Nicholson, on Lambton Harbour. The wharfage accommodation here is second to none in the colony, and the wharves present always a busy scene of life with the numerous steamers and sailing-vessels continuously loading or discharging. As many as six ocean-going steamers are not unfrequently seen alongside, loading with wool, frozen meat, and other products, for conveyance to Europe. The port possesses a patent slip at Evans' Bay, within a short distance of the city. Founded in 1840 by the New Zealand Company, the city occupies the flats skirting the original shore-line,

long since obliterated by the reclamation of the foreshore, which is now mostly covered with fine buildings. Rising close behind the old shore-line is a range of hills, the lower parts of which are all built over. The population of the city at the present time is about 44,000. Being the seat of Government, it contains the residence of the Governor and the headquarters of the Government departments, which are placed in what is said to be the largest wooden building in the Southern Hemisphere. There are several noticeable public buildings, amongst which must be mentioned the Parliamentary Buildings, containing a valuable library, General Post Office, Government Life Insurance Offices, Government Printing Office, Public Library, School of Art, and Harbour Board Offices. The Colonial Museum, under the management of Sir James Hector, and the Botanical Gardens, are also worthy of notice. The city is lighted by electricity, and its streets are well kept and clean, whilst an excellent supply of water is obtained from the Wainui-o-mata River, on the other side of the harbour. The principal industries are represented by iron- and brass-foundries, sawmills, soap-and-candle works, boot-factories, aërated water, meat-freezing works, coach-building, rope-and-twine works, sash-and-door factories, brick-, tile-, and pottery-works, besides a match-factory and innumerable other smaller works of various kinds. The city is increasing with rapid strides; its excellent position, together with the fine back-country, places it in the front rank of New Zealand towns. Its principal suburbs are Onslow, Melrose, and Karori, each containing from 1,200 to 3,000 inhabitants.

The Township of Petone is situated near the mouth of the Hutt River, seven miles from Wellington, on the railway-line. It has a population of 3,780, and is a rising township, containing the Government Railway Workshops, a woollen factory, with a meat-freezing and preserving establishment. The Lower Hutt, almost immediately adjoining, has also a large population, and some well-built residences with beautiful gardens. The Upper Hutt, situated at the head of the valley, has many small farms, owned by some of the very early settlers. The railway here starts the ascent of the Rimutaka Range.

Featherston, situated at the foot of the Wairarapa Valley, fifty-one miles by rail from Wellington, is a small township, with butter- and cheese-factories in the neighbourhood. Roads lead from it to Martinborough and the East Coast, and also down the Wairarapa Valley to Palliser Bay.

Greytown North is situated three miles off the main line of railway, and near the middle of the Wairarapa Valley, fifty-three miles from Wellington. The chief industries are sawmilling and coachbuilding. The population is 1,122 persons.

A few miles further north is the Town of Carterton, where are to be found timber-mills, cheese-factories, &c., and a population of 1,205 persons. There is some splendid farming land in this locality on the banks of the Ruamahanga River.

Masterton is situated at the head of the Wairarapa Valley, on the Wellington-Eketahuna Railway, sixty-seven miles from the capital. It is the centre of an agricultural and pastoral country, and has a population of 3,949. It is lit by gas, and has several industries, such as fellmongery, rope-making, flax-mills, coach-factory, &c., and, in addition, has some excellent fish-breeding ponds, from which many of the rivers in the colony have been supplied with trout. An important coach-road leads from here through a fine pastoral district to Tinui, and on to Castlepoint on the East Coast, where a large quantity of wool is annually shipped to Wellington for export.

North of Masterton is the Opaki Plain, and beyond is the entrance of the once famous Forty-mile Bush, which is now a thriving pastoral, agricultural, and dairying district. Butter-factories have been established at numerous centres.

Eketahuna is, by rail and road, ninety-four miles from Wellington. From there a main road leads to Alfredton, and up the Tiraumea Valley, through the East Puketoi country, to Weber and Dannevirke, on the Napier Railway-line.

Pahiatua, a township about fifteen miles beyond Eketahuna, has a resident population of 1,209. It is the county and market-town of a large and improving district, and will probably also become the centre of a large dairying industry. Several branch roads run from Pahiatua into the adjoining country, the principal one leading to Makuri through a beautifully-wooded gorge. From

there another branch road passes over the Makuri saddle into the East Puketoi country.

On the West Coast, Pahautanui, at the head of the Porirua Harbour, is the centre of a small agricultural community of early settlers, the old coach-road to the West Coast running through it; and there is a branch-road leading over to Hayward's in the Hutt Valley. Paikakariki, twenty-seven miles from Wellington, may be considered the commencing-point of the West Coast settlements, which are springing up in every available valley along the coast. At Otaki, forty-seven miles from Wellington, by rail and road, there is a township, and a large Native settlement. At Manukau, Levin, and Shannon, thriving townships have arisen since the Manawatu Railway Company opened up the land round about, much of it being rich farming and grazing country. Between Shannon and the Manawatu River there is a large raupo or flax swamp, named Makurarua, containing at least 15,000 acres of fine alluvial soil, which is being gradually drained by the company, and will probably at some future period become grazing-land.

Foxton, a township at the mouth of the Manawatu River, is a small shipping port, containing about 1,200 inhabitants. It is connected with Palmerston North by a branch railway, and is the outlet for a large area of good agricultural land.

Palmerston North is an inland town at the junction of the Wellington–New Plymouth and the Palmerston–Napier Railways, situated on a fine plain in the midst of a most excellent farming district at a point eighty-eight miles from Wellington, and 110 miles from Napier. Its population is now upwards of 6,500. It is lit with gas, and has a good water-supply. A fine bridge across the Manawatu River connects it with the Fitzherbert Block, a tract of rich agricultural land. Nine miles from Palmerston is the Township of Ashhurst, at the mouth of the Pohangina Valley, up which settlement has now extended for a distance of twenty-two miles. Several large farm-homestead association blocks have been selected up this valley.

Feilding, 104 miles from Wellington by rail, with a population of 2,298, is becoming one of the most important towns on the West Coast, as it is the centre of a very fine locality, and the outlet for a large tract of inland country, the forest on which is fast being felled. A coach-road connects it with Birmingham (Kimbolton) and Pemberton, about thirty-two miles distant. On the seaward side for a distance of twenty miles there is also much good agricultural land, extending on the north-west to the Rangitikei River, and including the Township of Halcombe. There are several dairy factories established in the neighbourhood.

Marton, 123 miles from Wellington by rail, with a population of 1,100, one of the earliest of the West Coast settlements, is also the centre of an agricultural country. The Township of Bulls, on the north side of the Rangitikei River, lies between Marton and the coast. From Marton Junction the southern part of the North Island Main Trunk Railway extends up the Rangitikei Valley to Hunterville, a good-sized township in the centre of a grazing district, and from thence as far as Mangaonoho, twenty-three miles from Marton; from there a coach-road has been made to Ohingaiti, beyond the Makohine, where a large viaduct is now being built so that the railway traffic can be continued. From Ohingaiti the coach-road has been made to Turangarere, and from thence to Tokaanu, on Lake Taupo, in the Auckland District.

Wanganui, situated near the mouth of the river of that name, is the oldest town after Wellington, from which it is 151 miles by rail—the distance by sea being only a hundred and twenty miles. It is the centre of an excellent farming district, and has a considerable trade, and several manufactories. Near the mouth of the river are freezing-works, the meat from which is conveyed by lighters to the large English steamers which lie off the mouth of the river. The town is lit with gas, and has a good water-supply. Not far from it are some extensive railway workshops. Altogether it is a thriving place, with a population of about 7,300. The Wanganui River is navigable for a light-draught steamer up to Pipiriki, a distance of fifty-six miles, and for canoes a further distance of eighty miles to Taumaranui. A branch road extends from Pipiriki through the Waimarino Forest to Ohakune, and on to Karioi on the Murimotu Plains, thence by way of Turangarere and Moawhango to Napier.

Crown or Native Lands available for Future Settlement.

Kaitangata, Te Mara, and Kaipararo Blocks.—These blocks, containing about 58,000 acres of second-class pastoral country, were opened for sale in September, 1893. The lower portions have been taken up and are being settled on, but the balance of the blocks, to the extent of about 35,000 acres, has lately been withdrawn from sale, with the object of having this area more fully explored, back lines laid off, road access provided for, &c. The remaining unsold portions of these blocks found suitable for settlement will be re-offered when a new scheme of subdivision has been approved by the Land Board.

Mangapapa Block.—This block is situated on the east side of the Waitotara River, and contains land suitable for pastoral purposes. An area of about 800 acres will shortly be offered.

Town Land.—Further sections in Raetihi, Ohakune, Taihape, Makuri, Pongaroa, and Levin Townships will probably be opened for sale at Wanganui, Pahiatua, and Wellington on dates due notice of which will be given in the local papers.

About 20,000 acres, known as the Retaruke Block, on the Wanganui River. It is proposed to open this under the small grazing-run system during the summer.

Motukawa Block.—8,180 acres, situated to the north-west of Taihape, is now under survey, and will shortly be in the market.

Horowhenua Block.—17,500 acres near Levin is subdivided, and will shortly be offered under village homestead and optional systems.

Awarua Block.—There is an area of about 101,000 acres purchased by the Crown in this block available for future subdivision and disposal. This area for the most part consists of the rougher portion of the block, and will probably be occupied as pastoral country.

Forfeited Farm-homestead Sections.—A number of farm-homestead sections which have reverted to the Crown in the different Association Blocks in the Wairarapa South, Rangitikei, Wanganui, and other counties, are now being prepared for sale, and will be re-offered at early dates under the optional systems of the Land Act.

Due notice of these dates will be given in local papers, and sale lithos, with full particulars, will be published.

Improved-Farm Settlement Lands.

All the available land suitable for holding under the improved-farm conditions has now been allotted, but if any of the sections now held under this system should be forfeited, they will probably be ballotted for amongst applicants in the district who are known to be of good character and likely to make good settlers. If further blocks of suitable land for this system are found, they will be cut up and opened on the same conditions.

Lands Open and Available for Ordinary Selection.

Waitotara.—The Te Ngaue Block, 1,546 acres of second-class pastoral land, is now open for selection.

Waimarino.—A block of about 46,550 acres, on the Retaruke, Oio, and Kaiticke Rivers, has had roads surveyed through it, and is now open for selection. There is an additional block of 27,000 acres, which is being surveyed, and will be offered as grazing-runs. 32,000 acres at the head of the Retaruke and Makino Streams have also been roaded. The rest of the Waimarino country, containing about 250,000 acres, is more or less broken, and will probably be opened later on as second-class pastoral country or small grazing-runs, to enable it to be taken up in larger sections.

Rangiwaea No. 2 Block.—One section of an area of 580 acres is open for selection in this block, which is situated between Upper Wangaehu and Turakina Rivers.

A number of forfeited Farm-homestead Sections are now open for selection in the following blocks: Sommerville, Palmerston North Knights of Labour, Marton No. 3, Umutoi, Pahiatua No. 1, Masterton Reform, Christchurch, Woodville, Mecalickstone, Waimarino, and Wellington Fruitgrowers.

Tauakira No. 1 Block.—Ten sections, of an area of 10,827 acres, are open for selection on optional systems. This block is situated on Wanganui River, about 28 miles from Wanganui.

Two lots in Tiriraukawa and Momahaki Districts, 673 acres and 2,548 acres, are open for selection on small grazing-run systems.

An area of 3,000 acres in Akatarawa, Waiohine, and Wairarapa Districts is open for selection on pastoral lease for a term of twenty-one years.

Pipiriki Township.—Leases of thirty-one allotments for the term of twenty-one years, with right of renewal for a further term of twenty-one years, are open for application by tender.

Tokaanu Township.—Leases of one hundred allotments for the term of twenty-one years, with right of renewal for a further term of twenty-one years, are open for application by tender.

Potaka Township.—Leases of fifty-eight allotments for the term of twenty-one years, with right of renewal for a further term of twenty-one years, are open for application by tender.

Parata Township.—Leases of three allotments for the term of twenty-one years, with right of renewal for a further term of twenty-one years, are open for application by tender.

Wharangi (Foxton Sanatorium).—Leases of twenty-three allotments for the term of fourteen years are open for application by tender.

Tongariro, Rangipopo, and Kaimanawa Blocks.—105,000 acres have been acquired by the Crown, but none of it is likely to be taken up for settlement for a long time to come.

"Crown Land Guides" and sale lithographs, giving full particulars of lands open for selection in this Land District, will be forwarded to any one on application to the Commissioner of Crown Lands, Wellington.

Native Lands.

Townships are now surveyed at Pipiriki, Tokaanu, Parata, and Potaka; sections in all of which are open for leasing under "The Native Townships Act, 1895."

The allocation of the Crown's purchases in the Raetihi, Tauakira, Maungakaretu, Mangapapa, Raketapauma, Rangiwaea, Ngaurukehu B., Motukawa Nos. 1 and 2, Te Tuhi Nos. 2 and 4, and Kahakaha Blocks, has been made by the Land Court; and the surveys of the land allotted are in hand, and they should be available for settlement soon after the surveys are completed.

The blocks under lease to Europeans contain about 475,000 acres, the principal being the Murimotu, Rangipowaiau, Owhaoko, Mangohane, and Ruanui, occupied by Mr. Studholme; and the Oroumatua, leased to Mr. Birch. Of others passed through the Native Land Court there are about 526,000 acres which are fit for settlement, the principal being the balance of the Awarua and the Motukawa, Raketapauma, Te Tuhi, and Rangiwera Blocks in the central district, Raetihi in the Waimarino district, Tauakira, and Ohotu, on the Wanganui River. Those not suitable for settlement at present are the Te Hautu, Ohuanga, and Kaimanawa, on the east side, and the Oahukura on the west side, of Tongariro Mountain, containing an area of about 345,000 acres.

The Native lands which have not passed the Native Land Court contain an area of about 140,000 acres, the principal being the Tupapanui, Mairekura, Tawhitinui, and Papahaua Blocks, on and between the Wangaehu and Wanganui Rivers, and some others on the west side of the latter river.

Pastoral and Agricultural Industries.

The pastoral industry is by far the more important, the total area in grass in 1901 being 2,488,265 acres as compared with 91,839 acres under crop. Of the area in crop, 5,996 acres were in wheat, 25,435 in oats, and 39,831 acres in turnips or rape, the rest being in potatoes or other crops.

The following figures will show the average return per acre of grain, for the year 1901: Wheat, 29·82 bushels; oats, 38·71 bushels; barley, 34·97 bushels.

The area in sown grass now exceeds that in any other district in the colony, though the area under crop is very small as compared with either the Otago or Canterbury Districts. In April, 1900, there were 4,082,415 sheep; and in October, 1900, the cattle numbered 264,571, and horses 42,364. The total area in gardens is given as 2,288 acres; in orchards, 3,972 acres; and in plantations, 4,406 acres.

Dairy Industry.

Both soil and climate are well adapted for the production of butter and cheese, and hence we find creameries and butter-factories increasing in number very considerably each year, and the export constantly augmenting.

Forty-seven butter- and cheese-factories were returned in August, 1901, as at work in the Wellington Provincial District.

Phormium Tenax.

The principal flax-mills working are at Featherston, Carterton, and Martinborough, in the Wairarapa, and at Foxton on the West Coast. This industry fluctuates greatly, in accordance with the price ruling for the dressed article. In 1896, a period of great depression for the industry, only thirteen mills were at work, employing 207 men and 35 boys; the machines driven by water-wheel or engine working up to 124-horse power, but this number has greatly increased since.

Timber Industry.

Sawmills are to be found in different parts of the district where the means of communication are sufficient, the timbers cut being principally totara and red pine, both of which are largely used in house construction and other works. Others of the native woods are very beautiful, but are utilised only to a small extent.

The principal mills are at Pahiatua, Eketahuna, Masterton, and Carterton, in the Forty-mile Bush and Wairarapa districts, and at Levin on the West Coast, besides which there are several mills in Wellington for dressing the rough material. In the whole district there were in 1896 sixty-four mills, of an aggregate of 1,117-horse power, engaged in this industry, employing 975 hands, the output of sawn timber being 34,605,504 ft., and the total value, including posts and rails, resawn timber, doors, sashes, &c., £157,107, which, next to Auckland, is the highest for any provincial district in the colony.

THE MARLBOROUGH LAND DISTRICT.

C. W. Adams, Chief Surveyor.

Boundaries.

The Marlborough Land District, occupying the north-east corner of the Middle Island, and containing about 2,635,000 acres of land, is bounded generally on the north and east by Cook Strait and the East Coast as far as the Conway River; thence by that river to its junction with the Towy River; from this point, by straight lines, rivers, and the summits of watersheds to the western side of Tennyson Inlet, Pelorus Sound. From the Conway to the Acheron River it abuts on to the Canterbury Land District, and from that river to Pelorus Sound it is bounded by the Land District of Nelson.

The widest part of the district is from Cape Campbell to Tophouse, a distance of about sixty-seven miles, and the extreme length from Cape Jackson to the Conway is 120 miles.

Physical Features.

The district throughout is generally mountainous, but none even of the highest peaks are covered with perpetual snow, although Tapuaenuku, the highest of the inland Kaikouras, attains an altitude of 9,462 ft. Of the Seaward Kaikouras,

or Looker-on Mountains, the highest points are Kaitarau and Whakari, which are 8,700 ft. and 8,500 ft respectively. There are several lesser peaks, from 4,000 ft. upwards.

The view from Kahautara Bluff, south of Kaikoura Settlement, looking northwards, when the Looker-on Mountains are snow-capped, is said to be one of the finest in New Zealand.

Geologically, the district may be briefly described as follows: North of the Wairau River the rocks belong chiefly to the Upper and Lower Devonian series, with a belt of Silurian between them, embracing the country along the west of Queen Charlotte Sound to Cook Strait. Within these series auriferous deposits are found, and at present worked at Mahakipawa, Wakamarina, and Wairau Valley. In Endeavour Inlet an antimony-mine has been worked for some time. The country south of the Wairau River may be said to belong chiefly to the Carboniferous Age, with patches, along the coast and up the Clarence Valley, of Cretaceo-Tertiary and Lower Greensand formations; while along and between the Awatere and Clarence Rivers volcanic formation and numerous intrusive dykes occur. The Red Hills also, at the head of the Wairau Valley, are of volcanic origin.

Coal has been discovered in the neighbourhood of Picton, and in the Clarence Valley, but none has been as yet successfully worked within the district. A narrow belt of Tertiary limestone, suitable for building purposes, extends, with small interruptions, from Cape Campbell to the boundary of the Canterbury Provincial District. The Marlborough land may be divided into three classes: Open land, generally covered with associated grasses; forest-land; and intermediate, or land partly forest, partly covered with scrub, fern, or other rank vegetation. This original condition of the soil naturally gave rise to a localisation of industries, and a very unequal distribution of settlement. Thus the open country was taken up for pastoral purposes; in the forest country the timber industry was developed, and the intermediate land passed into the hands of farmers. Though agriculture is now extending into the pastoral and forest country, and considerable areas of forest-land have been cleared and laid down in grass, the portions of the district characterized by these respective industries are still well defined.

In the northern part of the district, bounded by Cook Strait, numerous deep fiords and bays run far into the land. The principal of these are Pelorus and Queen Charlotte Sounds, Tory Channel, Port Underwood, and Port Gore.

These Sounds are very picturesque, but the hills surrounding them are not so rugged and precipitous as are those of the thirteen celebrated Sounds on the west coast of Otago and Southland.

Though generally steep, the land is not too rough to be used for pastoral purposes, and nearly all the land in the Sounds is occupied by thriving settlers.

Pelorus Sound, the most extensive and picturesque, is thirty-four miles long, following the course of the main channel, with the Town of Havelock at its head. There are many bays and inlets branching off in all directions; the largest of these is Kenepuru Sound, fourteen miles long. Pelorus Sound, including its branches, has a shore line of over 300 miles in length, not counting islands.

Queen Charlotte Sound is the next in length, being thirty miles from its entrance to its head; it also has many bays and inlets, one of which is Picton Harbour, twenty-five miles from the entrance.

Tory Channel is ten miles long, and forms the most direct line of communication between Picton and Wellington. The distance from Wellington Wharf to the entrance of Tory Channel is about forty miles, and about twenty more to Picton.

The shore-line of Queen Charlotte Sound and Tory Channel is over 200 miles in length. The entrance of Queen Charlotte Sound is about twenty miles distant from that of Pelorus Sound, and this latter is about twelve miles from the French Pass. Generally there is deep water in all the sounds and bays, and good anchorage can be found near the shore. The country is hilly everywhere in the neighbourhood of the Sounds, the highest point being Mount Stokes, 3,951 ft. above sea level.

Rivers.

Four considerable rivers, the Wairau, Awatere, Clarence, and Conway, rise towards the western boundary of the district; the two former, running east and north, fall into Cook Strait; the two latter, taking a southerly and easterly course, discharge into the sea on the eastern side of the Island. These rivers water large and fertile valleys, but none can be entered by vessels except the Wairau, which is navigable for small steamers for about ten miles from its mouth.

Plains.

The Wairau Plain, containing about 65,000 acres, on which stands Blenheim, the capital of Marlborough, is the principal block of agricultural land within the district. The soil, generally good, is, on the lower or seaward side of the plain, extremely fertile, especially in the neighbourhood of Tua Marina, Spring Creek, and near Blenheim, which is surrounded by numerous gardens, with rich deep mould, and well sheltered with trees. The average yield of wheat for the plain is about 25 bushels per acre; of oats and barley, 35; of peas, 30; and of potatoes, 10 tons per acre. Hops have been successfully grown for many years in the neighbourhood of the town, but, owing to the high price of labour, their cultivation has not extended. The plain, traversed in all directions by good macadamised roads, and dotted over with numerous comfortable homesteads, standing in clumps of trees amidst well-cultivated fields, has already an old-world appearance. More than half the population of the Marlborough Land District—about 13,000, according to the last census—is centred in the Town of Blenheim and on the Wairau Plain. Besides this plain there are several thousand acres of terrace flats and valleys along the larger rivers, notably at Starborough, on the Lower Awatere, all suitable for closer settlement, and capable of sustaining a large population.

Lakes.

There are not any lakes worthy the name. The largest is Kapara te Hau, more familiarly known as Grassmere, situate on the coast between the Awatere River and Cape Campbell. It is about three miles in diameter, and very shallow, being, indeed, no more than a lagoon, as during a dry season there is little or no water in it.

There are two other lakes of small size, viz.,—Lake Elterwater, four miles south of Lake Grassmere, and Lake McRae, situate in the open country between the Awatere and the Clarence Rivers.

Forests.

The portion of Marlborough north-west of the Wairau River, extending to the boundary of the Nelson Land District, and including the County of Sounds, in all about 280,000 acres, was originally covered with dense forest. In the valleys and on the lower hill-slopes, rimu, kahikatea, matai, totara, miro, and tawa were the principal forest-trees. The higher portion of the hills and steep spurs are clothed with the various species and variety of birch (beech), to which along the shores of the Sounds were added pukatea and kohekohe, the latter locally called cedar.

Since 1860 sawmills have been at work in various parts of the district. Thirty-two mills have been erected, and have worked for longer or shorter periods. Havelock, on the Pelorus Sound, is at present the headquarters of the timber trade.

The hills along the shores of the Sound will, for many years, furnish birch sleepers. There are other timbers left in places, but nowhere sufficient to justify the erection of a mill, unless pukatea wood, hitherto neglected, could be utilised. It is a light, tough timber, well adapted for boat-building and for packing-cases. The quantity of pine timber remaining in the Kaituna and Onamalutu Valleys is small, but there is a good supply of birch and other wood, suitable for fencing and firewood. On these valleys the Wairau Plain is mainly dependent for timber.

The Pelorus Valley, with its tributaries the Wakamarina, Rai, Ronga, and Opouri Valleys, still contain about 300,000,000 ft. of convertible timbers, exclusive of the birch, of which there is a large amount of the best quality on the hills and terraces. The Wairau, Blenheim, and other districts extending southwards must depend for the future on this source for all their building material.

In the neighbourhood of Kaikoura, along the base of Mount Fyffe, and in the Hapuku Valley, there is another small block of forest-land in which three small sawmills have been erected. The quantity of timber suitable for sawmill purposes in this block is very limited, but it will furnish the neighbouring country with firewood and fencing for many years.

Soils and their Uses.

The Wairau Plain, which is the principal block of agricultural land, has been already dealt with. The second agricultural centre is in the neighbourhood of Kaikoura. The land extending along the base of Mount Fyffe, between the Kohai and Hapuku Rivers, about 13,000 acres in extent, is held in small or moderate-sized farms; the soil is good, the block known as "The Swamp," between Mount Fyffe and the Peninsula, being particularly rich. In the Pelorus, Kaituna, and Onamalutu Valleys, and in the Sounds, settlers following in the wake of the sawmills have already converted much of the land worked over into grazing-farms. The land is of three descriptions—alluvial flats, terraces, and hill-sides. On the flats in the larger valleys the soil is rich, producing heavy crops of oats, peas, beans, and potatoes, wherever it has been brought into cultivation. The terrace-land varies much in quality, but generally grows good grass, as do also the hills on which tawa formerly grew; the birch country being very barren. On the small bush-farms cattle-grazing is the chief pursuit. Out of 12,500 head kept in Marlborough, 4,500 belong to the forest country.

Grazing.

About 1,680,000 acres of the Marlborough Land District are at present devoted to keeping sheep. The leaseholds in the northern parts of the district contain a large extent of scrub- and fern-covered country, now producing little or no food for sheep, but capable of improvement. The total number of sheep depastured is 789,218, distributed as follows amongst the counties into which the land district is divided: Marlborough County, 492,735; Sounds County, 141,716; Kaikoura County, 154,767. On the natural pasture of the open country merino sheep are kept almost exclusively, the land carrying from half to one sheep per acre. In the forest country, on sown grass, the land keeps from two to four crossbred sheep per acre. Along the shores of the Sounds large areas of hill-land have been taken up on lease, and are now being cleared and laid down in grass expressly for keeping sheep, but generally throughout the forest country the holdings are small or of moderate size, hence this is, after the Wairau Plain, the most populous portion of the district. The export of wool during last year amounted to about 9,000 bales.

Industries.

Gold-mining has been carried on for some years, principally at Mahakipawa, Wakamarina, and Wairau Valley. At present not much gold is being obtained, although there are now strong indications of a great improvement in the gold-mining industry.

Several dredges are about to start work in the Wakamarina River and Wairau Valleys, and if satisfactory results are obtained a number of other claims will have dredges placed upon them.

Eight sawmills are at work within the district: one at Kaikoura, and the others in the Pelorus, Kaituna, Onamalutu, and Pukaka Valleys, and in the Pelorus and Queen Charlotte Sounds. The principal one is Messrs. Brownlee and Co.'s, in the Pelorus Valley, their tramway being about thirteen miles long, the output last year being about 3,000,000 ft. Messrs. Brownlee and Co. have fifty-seven men employed, and keep two vessels running between Havelock and Lyttelton.

During the year the flax industry employed eleven mills. The quantity of hemp shipped during the year was 2,000 bales and 457 bales tow.

In connection with one of the mills a rope-factory has been established, in which binder-twine made of short flax or tow is the main product.

There are two flour-mills at work owned by Messrs. Redwood Bros. The one at Spring Creek is a complete roller-mill, driven by water-power, and can turn out about 14 tons of flour in twenty-four hours. It is electric-lighted, and the

sack-working machinery is driven by electric motor. The other mill is also worked by water-power, and is situated near Blenheim.

There is a dairy factory at Spring Creek which contains all the latest improvements in machinery; 10 tons of butter were produced in 1900.

There is a first-class cheese-factory at Tuamarina. The factory is capable of turning out 80 tons. There is also a good cheese-factory at Kaikoura.

Climate.

Marlborough possesses one of the finest climates in the world; and at Blenheim it is fine weather nearly all the year round. There is almost a total absence of the boisterous winds that so frequently visit Wellington.

The original distribution of the open and forest lands was entirely due to climatic causes. At Cape Campbell, one of the barest places in the district, the annual rainfall is only 23·25 in.; in the Pelorus Valley, the centre of the forest country, it is over 65 in. This difference between the climates of the north-western and south-eastern portions of the district explains why the artificial pasture-land, when compared with the natural pasture, supports such a large amount of stock. Winter and spring are the wettest seasons, hence the dry climate is not unfavourable for agriculture. Wherever the soil is suitable, crops sown in winter and harvested in early summer can be successfully grown. Everywhere near the coast the range of temperature, considering the latitude, is very small. The thermometer seldom falls below 30 deg., or rises above 78 deg. Along the shores of the Sounds the mildness of the winter, owing to the curious distribution of land and water, allows lemons, oranges, passion-fruit, figs, and other sub-tropical fruits to be grown in favourable situations. On the lower hills and terraces of the forest country the chestnut (*Castanea vulgaris*) grows rapidly, and commences to bear fruit in five or six years. A few trees planted in the Pelorus Valley some twenty years ago are now yielding annually about 2 cwt. of nuts a tree. In all parts of the low country the common English fruit-trees—apple, plum, pear, cherry, &c., yield abundantly, the fruit, owing to the clearness of the atmosphere, being of excellent quality. In the high country, where snow falls occasionally during winter, red, white, and black currants can be produced in such quantities that with little labour they might be made an article of export to the warmer parts of Australia.

Towns.

The chief town, Blenheim, is situate on the Wairau Plain, at the junction of the Opawa and Omaka Rivers—a third river, the Taylor, would join at about the same point were it not that when not in flood it disappears beneath the surface, about three miles south of the town. Blenheim has been termed a miniature Christchurch, doubtless from its extreme flatness. Considering this, its streets are not so straight and wide as they should be. The Government Buildings, which comprise the Post and Telegraph Offices, Lands and Survey Offices, Courts of Justice, &c., form a handsome edifice in the centre of the town, which is well planted with deciduous and evergreen trees. It is about eighteen miles and a half from Picton by rail, and about nine miles from the sea by the Opawa River, which is navigable for small steamers. Blenheim is lit with gas, and supplied with water, principally by artesian wells. The population is 3,222.

The next town in importance is Picton, the principal port, only fifty-three miles by sea from Wellington. This little town, both in position and appearance, may be said to be the antithesis of Blenheim, being most picturesquely situated at the head of Queen Charlotte Sound, and nestling among hills, some of the higher ones still densely covered with birch and other forest. There is frequent communication with Wellington and Nelson by steamers averaging 500 tons, and vessels of the largest size can lie at the wharf at low-water. The direct exportation of frozen meat from Picton commenced in 1892, when 16,433 carcases were shipped. The Christchurch Meat Company exported from Picton for the year ended 31st March, 1901, mutton, 9,007 carcases, and lambs, 18,444 carcases. Picton possesses a malting establishment also, producing for export, as the excellent quality of the barley grown on the Wairau Plain insures a ready market. A small quantity

of oysters, mostly procured in Queen Charlotte Sound, is annually exported from Picton; with culture the supply might be almost indefinitely increased, many of the sheltered bays in both sounds being well adapted for the purpose. What is now being done along the Marlborough coast is a mere trifle compared with what might be accomplished if capital and knowledge were brought to bear on the fishing industry. Around the whole coast, from the mouth of the Conway to near the French Pass, the sea abounds in fish. Within the Sounds and amongst the islands of Cook Strait, hapuku, schnapper, moki, barracouta, raturi, kahawai, and rock-cod are extremely plentiful. Immense shoals of the southern herring (*Clupea sagax*) and of anchovies (*Engraulis encrasicholus*) frequent the inlets at certain seasons of the year, and quantities of fresh fish are exported from thence to various places within the colony. As steamers arrive at and leave Picton almost daily, shipments can be made without delay to all parts. Picton possesses a good gravitation water-supply. Its population is about 900 persons.

Havelock, situate at the head of Pelorus Sound, is, as has been already stated, the present headquarters of the timber trade, Messrs. Brownlee and Co.'s steam saw-mill, at the mouth of the Pelorus River, being only a mile or so from the town. Between Picton and Havelock there is a mail service twice a week, *vid* Cullensville, on the Mahakipawa Gold-fields. The population of Havelock is about 300 persons.

The Town of Kaikoura, the greater part of which is built on a raised shingle-beach, is situate at Kaikoura Peninsula, near the southern boundary of the district. The town, with the adjoining settlement of small farms, forms one of the most picturesque spots in New Zealand, lying as it does under the Seaward Kaikouras, or Looker-on Mountains. At the back of the town the peninsula, which is composed of Cretaceo-tertiary limestone, rises abruptly for about 100 ft., and affords splendid sites for dwelling-houses. Kaikoura is connected with Blenheim by a weekly coach service, the distance being about ninety-five miles. There is also direct steamer communication with Wellington and Lyttelton. The population of the town is about 500.

Roads and Railways.

The only railway is that between Picton and Blenheim, about eighteen miles and a half in length. The train, starting from Picton, runs twice a day. The railway has been completed for a distance of thirteen miles south of Blenheim, and its construction is actively in progress as far as the Township of Seddon, including a substantial railway and traffic bridge over the Awatere River, costing £22,500, which will be a very great boon to the district.

The Main North Road to Nelson, distant seventy-eight miles, is a good metalled road nearly the whole way. It runs up the Wairau Valley from Blenheim for about six miles, crosses the Wairau River into the Kaituna Valley, which it follows as far as Havelock—about twenty-eight miles. It then runs up the Pelorus and Rai Valleys, and ascends by easy gradients to the Brown Saddle, where it crosses the boundary into Nelson. An excellent coach-service—probably the best in the colony—has been established for some years, the coach running to and from Nelson on alternate days, covering the distance in eleven hours, and another coach-service twice a week has been established between Blenheim and Havelock.

The Main South Road, running over the Taylor Pass into the Awatere Valley, and through the Starborough, Flaxbourne, Kekerangu, and other properties, connects Blenheim with Kaikoura and the south, and is a good road during dry weather, although it might be much improved in places. Since the acquisition of the Starborough Estate by the Government the bulk of the traffic now goes *vid* the Redwood Pass, as it is a more direct route to the town of Seddon.

The portion between the Clarence River—over which a fine bridge was built some years ago—and the Hapuku River, runs along the coast under steep and picturesque hills covered with forest. During the last three years a road has been in course of construction to the south of Kaikoura, between the Kahautara and Conway Rivers. This road is now completed and forms part of the main Cheviot–Kaikoura Road, and, besides its great usefulness in opening up the country through which it passes, will also become a favourite route for tourists, as in many places it passes through most picturesque scenery.

A good road has been formed up the Wairau Valley, passing through the Bank-house, Erina, Lansdowne, Hillersden, and Birch-hill properties, and connecting with Tophouse, just outside the boundary, and distant fifty-six miles from Blenheim. At Tophouse there is an hotel and a telegraph-station, and from thence a good road leads to Belgrove on the Nelson Railway line.

A coach runs twice a week between Blenheim and Wairau Valley—twenty-five miles—where there is an hotel, a post- and telegraph-office, and one or two stores.

There is also a good cart-road running up the Awatere River—which it crosses and recrosses several times—as far as Molesworth Station, about seventy miles from Blenheim. Between these points there is a weekly coach- and mail-service.

There are other minor roads and bridle-tracks throughout the district too numerous to specify.

Crown Lands.

The area of Crown lands at present available for settlement is about 150,000 acres, but of this area 100,000 acres are of very poor quality, being chiefly the summits of high, rugged country. The balance of available area lies principally in the Pelorus, Rai, and Wakamarina Valleys, and in the Sounds, and will doubtless be readily taken up when thrown open for selection.

THE NELSON LAND DISTRICT.

T. HUMPHRIES, Chief Surveyor.

General Physical Features.

The Nelson Land District comprises the north and north-western portion of the Middle Island, the greater part being high and mountainous, and on the western and inland ranges covered with dense forest to the bush-limit, at from 4,000 ft. to 4,500 ft. Cape Farewell, the northernmost point, is situated at the western entrance of Cook Strait, on the south side of which lie Golden or Massacre Bay, and Tasman Bay, more commonly called Blind Bay. The former derives its name from the massacre of a boat's crew belonging to Tasman, who visited it on the occasion of his discovery of New Zealand in 1642. At the head of the latter, which has a depth of fifty-four miles from its entrance, stands the town of Nelson. From Separation Point, on the western side of Blind Bay, a range of mountains from 3,000 ft. to 4,000 ft. in height extends southward to Mount Murchison. It consists of a granitic formation, with slate, limestone, and sandstone belts. From Pelorus Sound, on the east, commences another range—a portion of which is serpentine, forming a mineral belt immediately south of Nelson City. It reaches an elevation of 6,000 ft., and runs in a south-westerly direction to the St. Arnaud Range, terminating in the Spencer Mountains, a large central mass attaining a height of 8,000 ft. above the sea-level. To the westward of the Spencer Ranges and those on the further side of Blind Bay are the Brunner, Lyell, Marine, and Tasman Mountains, from 5,000 ft. to 6,500 ft. in height. Still further westward along the coast are the Paparoa, Buckland Peaks, and Papahaua Mountains, about 4,500 ft. at their highest point, and the Whakamarama Range, extending from Rocks Point to Cape Farewell. There are also a number of isolated mountain-masses here and there through the district.

The inland Spencer Mountains are the source of the principal rivers of the district south of the Buller River, and are thus described by Sir Julius von Haast: "On the southern slopes of this wild alpine-stock we find the principal sources of the Grey, or Pohaturoha; on its north-east side the sources of the Wairau; on its eastern side those of the Acheron and Clarence; and in the deep recesses of these snow-clad giants those of the Waiau-ua, or Dillon: so we may say that, with the exception of the Takaka and Aorere, which fall into Massacre Bay, the Wangapeka and Motueka, which run into Blind Bay, the Karamea and smaller streams, which reach the sea on the West Coast to the north of the Buller River, all the rivers of any size in the northern part of this island take their rise in this magnificent chain."

Rivers.

The Buller River (Kawatiri) has its source at a point about sixty miles south-west from Nelson, where it flows out of the beautiful alpine lake Rotoiti, lying 1,800 ft. above sea-level at the foot of the lofty St. Arnaud Range. This river breaks through the massive mountain chains of the interior in a transverse or easterly direction, forming, where it receives no tributaries, a succession of magnificent rocky gorges, and, after a course of about one hundred miles, finally discharges its waters into the ocean on the West Coast. The Gowan River, a tributary, has its source in another exquisite lake, Rotoroa, 1,623 ft. above sea-level. Other tributaries of the Buller are: the Matakitaki, Maruia, Owen, Matiri, and Inangahua, all of which take their rise in the snowy ranges.

The Grey River (Mawhera), also discharging its waters on the West Coast, takes its rise in Lake Christabel, near the western flank of the Spencer Range. It has a very large basin, and numerous tributaries, of which the Ahaura is the chief.

Lakes.

The lakes of the district are alpine in character, surrounded by grand mountain and bush scenery. The principal are: Rotoiti, lying east, and Rotoroa south-east, of Mount Murchison; Matiri, to the west of Owen Range, 980 ft. above the sea; Lake Tennyson, 3,614 ft., on the eastern flank of the Spencer Mountains; Lake Christabel, on their western flank; and Lake Hochstetter, at the head of Nelson Creek.

Plains.

The Waimea Plains, near Nelson, with the Lower Motueka, Riwaka, and Takaka Valley lands, formed part of the original settlement of the New Zealand Company, and are occupied mostly by small settlers. Inland are the Tirmumea Plains, 1,100 ft. above sea-level, and the Maruia, 1,300 ft. These are, together, about 30,000 acres in extent. They are surrounded by high mountains heavily timbered, and the land is of only second-rate quality. On the West Coast the level lands are Totara Flat and Ikamatua Plains, in the Grey Valley, Mawhera-iti, and Inangahua Valleys, lying on the eastern flanks of the Paparoa coastal range. There are also open *pakihis* at Addison's Flat, on the south side of the Buller, and low swampy lands on the north side; northward is the heavily timbered country of the special settlement at the mouth of the Karamea.

Forest.

The area of the district is estimated at 5,430,000 acres, of which the open land under 2,000 ft. in altitude is, approximately, 930,000 acres; the area of forest-land under 2,000 ft., about 1,932,000 acres; and the open land above that altitude, about 760,000 acres, inclusive of bare mountain summits. The wooded country is estimated at 3,740,000 acres; of this area probably about 1,150,000 acres is scrub and stunted bush; and of the remainder, not 1,000,000 acres at the outside would be available for clearing. The timber on the western side consists of red- and white-pine, matai (or black-pine), totara, kawhaka (or cedar), rata, and occasional silver-pine, besides black- and red-birch (*Fagus fusca*). These varieties are also found, but in smaller areas, on the eastern side; birch preponderating. A large amount of timber is used in the mining industry for props and planking, and throughout the districts generally for shingles, fencing, firewood, sleepers, &c. There are fifty-nine sawmills at work, with an output of about 21,250,000 superficial feet per annum.

Agricultural.

Nelson has little land suitable for agriculture, most of it already taken up. On the Waimea Plains is grown excellent barley, a small quantity of which is exported. Oats and chaff are sent in large amounts to the West Coast and elsewhere. Hops also form one of the chief exports. Wheat, maize, rye, and root-crops of most varieties are grown, and fruit is plentiful. The weekly wage of a farm-labourer is 20s. with board; without board he would receive 6s. a day. Ploughmen can get 20s. per week with board; without, 7s. 6d. a day.

Pastoral.

The total area of pastoral lands held under the Crown by 86 tenants on the 31st March, 1901, amounted to 328,955 acres. As the agricultural land is limited, settlers are turning their attention to the timbered mountain-slopes for grazing purposes. These, when the timber is felled and burnt, and the ground sown with suitable grass, will, after three to four years, carry about two sheep to an acre on fair soil, and more on the limestone country. The cost of felling and burning green timber is from 15s. to 20s. per acre; cost of mixed grass-seeds and sowing, about 15s. per acre; and a good paling-fence on ordinary bush-lands with double No. 8 wires at top and bottom, with ¾ in. palings and 7 in. posts sunk 2 ft. in the ground, can be erected at about 12s. per chain.

Mining.

The western side of the Nelson District was a *terra incognita* till about the year 1863, when gold was first discovered in large quantities. Miners flocked in at first from the other goldfields in New Zealand, then from Australia, California, and other parts of the world, until in 1865 the whole coast-line was peopled from Broken River in the north to Jackson's Bay in the south. Mining, at first altogether alluvial, developed into quartz-reefing, and hydraulic-sluicing of large areas. The agricultural lands about the Grey and Inangahua were taken up and cultivated; and, as mining became a more settled industry, the miners occupied and tilled the non-auriferous alluvial flats in the many valleys: hence at the present time a number of homesteads are scattered throughout the district.

Reefton and its neighbourhood forms one of the chief quartz-mining districts in New Zealand; and the West Coast, including Westland, has produced about 45 per cent. of the total gold raised in the colony. The oldest alluvial field is at Collingwood. Among other minerals found in the district are: silver, copper, chrome, antimony, manganese, and hæmatite. Extensive deposits of coal are found on the West Coast, within the areas of the Grey and Buller Coalfields Reserves. Coal is also found in Collingwood, in Blind Bay, and in West Wanganui Inlet; and there are numerous smaller areas of coal-bearing strata here and there throughout the district. The output from the mines at work within the district during the year ending 31st December, 1900, was 593,183 tons, of which 520,000 tons were shipped, 350,000 tons from Westport and 170,000 tons from Greymouth. Copper-ore is found in a serpentine rock-formation near Nelson, but the companies which have worked the ore have not hitherto been successful—the last one, "The Champion," failing from want of sufficient capital. Deposits of chrome-ore are also found here. Silver-ore has been worked in the Collingwood District; and at Parapara, in Blind Bay, there are widespread deposits of hæmatite iron-ore, combined with limestone and coal, waiting only for capital to develop them. It will be readily gathered from the above brief description that mining is the chief industry of the Nelson District. A great impetus has been given to the mining industry on the West Coast, in a manner similar to that which has taken place on the Auckland goldfields. In the Reefton district a large English syndicate has bought out several properties of quartz-mining companies, which have been paying concerns, although worked with limited capital and old-fashioned machinery, with the view of introducing the newest methods of working and the most improved gold-saving appliances. A number of wealthy syndicates are now in the field, and a great revival has taken place in prospecting for new reefs, and in developing numbers of others known to be auriferous, the working of which has hitherto languished for the want of capital to develop them.

Sawmilling, &c.

The timber industry on the West Coast has now become a very important trade. During the past year about 15,650,000 ft. of various kinds of wood, principally red- and black-pine, have been cut in this district alone for export, and silver-pine has been largely in demand for railway-sleepers for home consumption. There are also ten sawmills working in the Golden Bay district, the export amounting to about 5,600,000 ft. for the past year. A small industry in flax is also carried on.

Towns.

The chief town is Nelson, situated at the head of Blind Bay, in 41° 16′ S., and surrounded on all sides, except the north, by mountains reaching an elevation of 3,500 ft. With a mean temperature of 54·8° Fahr. it possesses a climate almost unequalled for its beneficial effects on invalids suffering from pulmonary diseases. There are many picturesque spots in the suburbs, and the city itself, with its cleanly-looking buildings and well-kept gardens, is one of the most charming spots in New Zealand. There is an old-established Boys' College, a High School for Girls, and a School of Music, besides Government and other schools. The Anglican Pro-Cathedral, built on the summit of a central hill, memorable as being the site of fortifications erected in the early days of the settlement for defence against an expected attack of the Natives, is a striking feature. The Roman Catholic Church, Convent, and school-buildings cover a large extent of ground. There is also at Stoke, a small village three miles from Nelson, a central Catholic Orphanage, surrounded by grounds of considerable area. There is a good supply of excellent water from a reservoir in the hills at the back of the town, and the streets are well lighted with gas. The several Government departments are housed in one roomy building, containing a large hall used for Supreme Court sittings and other public purposes. Nelson has a small natural harbour, formed by a boulder-bank running for eight miles parallel to the shore, deep enough at high tide to admit vessels of 1,000 tons burden. It is a port of call for the Union Steamship Company's coastal steamers, and has a small local fleet plying between the West Coast, Blind Bay, Picton, and Wellington. The town is reached from the eastward by a good main road from Marlborough. A railway-line has been constructed up country to the southward for thirty-three miles, passing through the farming villages of Stoke, Richmond (borough), Brightwater, Wakefield, Foxhill, and Belgrove. Leaving for the West Coast by a good main road, the traveller starts from the Motupiko Station on one of Cobb and Co.'s coaches, crosses Spooner's Range, the Clarke and Hope River saddles, and enters the Buller Valley at the junction of the Hope, about sixty-seven miles from town. He then enjoys a succession of views of mountain-gorge scenery, and, after traversing a gorge of seventeen miles in length, arrives at the Lyell, 107 miles from his starting-point. This is an alpine township, in a small quartz-mining neighbourhood. Here is a fine cast-iron girder bridge, spanning a rocky gorge of the Buller, and springing boldly from a bluff on the northern side. At 116 miles the junction of the Inangahua with the Buller is reached, the main road continuing to Reefton, with a branch road twenty-eight miles to Westport, which for twelve miles passes through some of the grandest river-gorge scenery in New Zealand.

Westport, the town next in importance to Nelson, is situated at the mouth of the Buller River. The harbour is sheltered from southerly gales by Cape Foulwind and its outlying rocks, and is accessible in nearly all weathers. A large sum has been spent on a system of harbour-works, designed by the late Sir John Coode. Westport is the place of shipment for the coal-mines lying northward as far as the Mokihinui River. The character of this coal for steam purposes stands almost unrivalled. The long line of coal-staiths on the northern bank of the river, with a fleet of steam-colliers loading alongside, does not fail at once to impress a visitor with a sense of the importance of the trade. Though much has already been done, yet the industry, from the extent of the coal-bearing strata, is capable of much larger expansion when the necessary capital can be found. The Westport–Ngakawau Railway to Mokihinui, connects with the mines and conveys the coal to the port. At the foot of the Mount Rochfort plateau, nine miles from Westport, is Waimangarua, and on the plateau itself is Denniston—both coal-mining villages. The latter, built at an elevation of 1,960 ft., is said to be the highest township in New Zealand. On a clear day it is well worth a visit, for the sake of enjoying the magnificent panoramic view of the southern Alps, which reach their highest point in Mount Cook, 12,349 ft. high, about 100 miles south. South of Westport are the alluvial gold-mining centres of Addison's Flat, Croninville, Nine-mile Beach, and Charleston.

From the Inangahua Junction, the main road continues southward through the Inangahua Valley, passing through cultivated lands, which are being gradually won

from the heavy bush, and at a distance of 136 miles from Nelson reaches the township of Reefton. Here, as at Westport, are good hotels, and, as in every one of the larger coast towns, a hospital receiving a Government grant-in-aid. This town was the first in New Zealand to be lighted by electricity. Through the Midland Railway Company's extension of the Grey–Brunner Government line, Reefton is now connected by rail with Greymouth, from whence it is for the most part supplied. About two miles inland from Reefton is Black's Point mining township, with several batteries at work in and about the place, a visit to which is generally paid by tourists wishing to see something of the gold-mining industry. Other small mining townships are: Boatman's, Capleston, Antonio's, Noble's, Orwell Creek, Hatters', Nelson Creek, and Twelve-mile.

Leaving Reefton by rail, and passing into the Grey Valley through a short tunnel, and by a bridge over the Grey River, Totara Flat is reached, nineteen miles distant. Here there is a considerable area under cultivation. Seven miles farther on is the decayed mining township of Ahaura. Small townships are springing up along the railway-line, and several large sawmills are working.

At the Grey River Gorge, eight miles from Greymouth, we enter the Borough of Brunner. This place is the oldest centre of coal-mining in the district. Owing to the effect of the coal-smoke from the coke-ovens on the surrounding cliffs and bush, and the appearance of the numerous miners' cottages nestling on the mountain-slopes, it has the look of a veritable "Black Country," such as may be seen in some coal-districts in England.

Several large sawmills are at work between this place and Greymouth, which we reach at a distance of 180 miles from Nelson, the centre of the Grey River from its junction with the Arnold being the southern boundary of the district at this part. The Midland Railway line, to connect with Canterbury by way of Arthur's Pass in the Otira Gorge, has been constructed on the Westland side of the Arnold River to Lake Brunner, the eastern shores of which it skirts for some distance, and from thence to the Teremakau River.

The town of Greymouth is situated on the south bank of the Grey River, in the Westland District, and is the shipping-port for the products of the coal-basin included within the area of the Grey Coalfields Reserve, the larger portion of which lies on the north bank of the river in the Nelson District.

The small town of Cobden is situated opposite the town of Greymouth, and is connected with it by a substantial bridge.

Roads, Tracks, &c.

Situate on the coast, fifty miles north of Westport, is the Karamea Special Settlement, principally settled from the Nelson and Motueka Valley districts. This part of the district contains some excellent but heavily-timbered land, and is reached from Westport by a good road, connecting with the Westport–Ngakawau Railway at the Mokihinui River. A bridle-track, also, connecting with Collingwood and Golden Bay, is nearly completed by the Government. This track passes along the coast northwards, thence up the Heaphy Valley to the Golden Downs, and down the Aorere Valley to Golden Bay. Here again is another coal-basin, which, though of inferior value to the older deposits on the western side, is likely to become of importance, having at the present time one mine in full work. Another coal-basin exists at West Wanganui and Pakawau.

In the Aorere Valley, of which Collingwood is the port, alluvial mining is still found to be payable, and the country contains some valuable timber in the upper part not yet utilised. Nineteen miles south, in Blind Bay, lies the small port of Waitapu, from which a considerable amount of sawn timber is exported, drawn from the Takaka Valley, and brought down by a steam tramway from the upper mills. From the head of this valley the main road is carried over a pass in the Pikikirunga Range, 3,476 ft. high, through the villages of East and West Takaka, Riwaka, Motueka, and Moutere to the town of Richmond, eight miles from Nelson. Inland are also the villages of Ngatimoti, Dovedale, Tadmor, and Sherry, each the centre of a number of small farms, and all connected by fairly-good dray-roads.

An inland road, partly bridle-track and partly dray-road, has been made from Nelson to Canterbury, by way of Tophouse, Wairau Gorge, Tarndale, Clarence Valley, Jollie's Pass, and the Waiau Plains. Here there are hot mineral springs, much visited by persons suffering from rheumatism and skin-diseases.

Crown Lands.

About 3,000,000 acres of Crown lands still remain unoccupied in the northern part of the Nelson District; they consist principally of high bush-country, with occasional patches of good valley-lands, the greater part being classed as second-class land. Of these, the area open for selection to date comprises 24,025 acres of surveyed lands, and 254,905 acres unsurveyed lands, of which the location, nature of soil, &c., have been briefly described in the foregoing pages.

THE WESTLAND LAND DISTRICT.

W. G. MURRAY, Chief Surveyor.

The Westland District occupies the central portion of the western watershed of the Middle Island, joining Canterbury on the east; its north and south boundaries with Nelson and Otago being the Grey, Arnold, and Awarua Rivers. The mean length is 200 miles, and its average width 24 miles. The area is 4,759 square miles, composed, for the most part, of the great central snow-clad mountain chain and its out-running ranges, intersected by narrow bush-clad valleys, and subsiding westward into undulating plateaux, river-straths, and shelving coasts.

Physical Features.—Mountains.

The great dividing range which constitutes the eastern boundary from Harper's Pass to Mount Aspiring presents a magnificent façade of snow- and ice-clad summits, representing every aspect of mountain grandeur, such as spires and battlements of rock protruding from ice and snow; precipices of enormous height, with cascades; drifted expanses of snow-fields, feeding glaciers; cañons, and ravined foot-hills covered to the top with forest.

Rivers.

A few of these lead from the foot-hills, and are of small volume; the others are snow-born streams descending from the central range, at first in narrow gorges amongst the mountains, but spreading widely on reaching the sea-board country. They are shallow shingly streams in winter, but swift deep rivers in summer. In the northern district all the larger rivers are bridged; and southward, ferries are placed on all the main streams, which, from the melting of the snow, are practically unfordable from September to January.

Forests.

Generally speaking, the whole of the district is covered with dense forest, from the sea-beach to the grass-grown tops of the high ranges, even the gaunt, broken mountain-faces being wrapped with exuberant foliage. The varieties of trees differ considerably according to soil and altitude. Kamahi and rata are the chief timbers, very useful for firewood, and, spread over the whole country, constitute an almost inexhaustible supply. Rimu is the chief milling timber, and this also is widely distributed from the sea-board to the interior uplands. Valuable stretches of white-pine belt the low-lying depression of the coastal lands, and the same may be remarked concerning the imperishable silver-pine. Clumps of black-pine of good quality are met with, also rarer patches of marketable totara; while serviceable cedars are scattered along the flanks of the inland ranges and all over the lower hills and plateaux. The approximate area of forest equals 2,394,951 acres, of which about 940,500 acres carry timber fit for the sawmill, and some 903,785 acres dwarfed alpine varieties.

Lakes.

A considerable and varied number are dotted over the district, no two being alike, but varying in character: comprising mountain tarns; coastal tidal lagoons; shallow reedy sheets; deep mountain-girt waters—all more or less forest-locked, and presenting every form of lacustrine beauty. In conjunction with their effluents they form valuable water-ways for light transport to adjacent districts.

Soils.

The high pastoral uplands have a coating of rich moulds, and this continues fairly good down to the heavy timber lands. The alpine forest is readily cleared, burns clean, and imported grasses grow luxuriantly, cocksfoot being the best, as it withstands fire and frosts. The lower flanks of the mountains hold a thinner soil, which at present hardly repays the heavy labour of felling; while the lower heights are somewhat abrupt and unfitted for cultivation. A margin, varying in width, of fertile slopes and fans fringes the bases of the hills, and, having a natural drainage, constitutes an area of excellent agricultural land.

The upland soils of the coastal undulations and terraces are light loams of moderate fertility, which rest upon transported gravels, the drifted accumulations of eroded hills. On these plateaux are numerous "pakihis," or natural clearings, which are mostly extensive tracts of swampy lands, with a peaty soil resting on thin layers of impervious clay, and non-porous gravels, or, in a few cases, on impacted glacial moraines: these formations all overlying loose drifts. The reclamation of these areas is only a matter of time, as the bulk of them are quite drainable.

Stretches of good alluvium border the rivers, streams, and sea-coast, and form the favourite location for settlers.

Climate.

The climate is equable and temperate, remarkably free from storms and fogs; and immediately after bad weather the clouds roll inland, and there is a prevailing clearness of sky. The rain-bearing winds are mostly from the north-west and north-east. The southerly winter gales usually coat the great ranges with snow, which, however, rarely falls below 2,000 ft.

Pastoral Lands.

The total area of pastoral lands amounts to 2,002,577 acres, 103,801 of which constitute high mountain grass districts, the balance, 1,898,776 acres, comprising the ordinary bush-clad country, much of which is quite inaccessible to stock. All over the coastal lands, along the slopes of the lower hills and in the bottoms of the valleys, large herds of cattle are bred and fattened on the dense undergrowth of the forest. The tussock herbage of the high lands is being gradually used by sheep-farmers, and in the near future these natural pastures will support large flocks.

Agricultural Lands.

The agricultural lands comprise some 307,344 acres of forest and 16,440 acres of open surface, such as swamps, grass-grown river-beds and fringes, &c. The bulk of these lands, when cleared of bush, grow abundance of root-crops, especially turnips, which are much used for fattening purposes. The even and moist temperature encourages the almost uninterrupted growth of grass and clover, which are very luxuriant, and favour stock-raising. Oats are also grown abundantly for local consumption, and for the most part are cut into chaff. Year by year the imports of potatoes, fruits, butter, and fat stock are decreasing, owing to increased local production.

Means of Communication.

The district is fairly well provided with means of communication. The railway now extends from Hokitika, *vid* Greymouth, to Reefton, branching at Stillwater to Jackson, in the Upper Teremakau; and a further extension to Otira is now constructed. Coaches twice a week connect with Canterbury, *viâ* Arthur's Pass, and ply daily between Ross, Hokitika, Kumara, Greymouth, and the neighbouring towns: while once a week a mail is conveyed on horseback southward to Gillespie's

Beach, and once a fortnight to Jackson's Bay. A subsidised steamer runs between Hokitika and the numerous southern ports as far as Jackson's Bay, plying every two months, thus enabling settlers to obtain supplies and to ship their cattle and produce to market. The Government steamer also calls at Big, Jackson's, and Bruce Bays on her quarterly trips from Dunedin. Steamers also trade regularly between Hokitika and Greymouth, and other parts of the colony. The Main South Road, which for many miles skirts the foot of the main range, has been so greatly improved of late years that the traveller can now ride comfortably and safely *vid* Haast Pass right through into Otago. Numerous bridle-tracks branch from the trunk line to various points, while the large open river-beds likewise give access to the country on either hand. From Jackson's Bay horse-tracks have been made, *viâ* Cascade River and Barn Bay, to open up the southernmost country. Sundry dips and *cols*, varying in height from 1,800 ft. to over 7,000 ft., leading down the central range, have been explored, mapped, and during the summer months are crossed from time to time by experienced mountaineers. Of these depressions, the only sub-alpine saddle is Haast Pass, all the others being liable to blocks by winter snows. A coach-road over Arthur's Pass and a horse-track through Haast Pass have been made. Another bridle-road is also in course of construction across Whitcombe's Pass, but between these points no trans-insular road exists. Tracks have also been constructed giving easy access to the Franz Josef and Fox glaciers, and in the future, as population increases, doubtless tourist and stock tracks will be constructed along many of the intervening routes. From Okarito northward the district is in direct telegraphic communication with the rest of the colony.

Harbours and Ports.

The harbours and ports of Westland are the following :—

Greymouth, twenty-four miles north-east of Hokitika: Extensive harbour-works have been carried out. A breakwater or sea-wall extends some 3,392 ft. seaward from the mouth of the river on the south side, and on the north side 1,125 ft., with internal half-tide training walls, the result being an average depth of water on the bar of 20 ft. 10 in. at high water and of from 8 ft. to 16 ft. at low water. Vessels of 1,000 tons can now come alongside the wharf. There is berthage accommodation of 1,824 ft., with a minimum depth of 12 ft. to 16 ft. at low water. The principal exports are gold, coal, coke, and timber. The number of vessels that entered the port during the year 1900 was: 600 steamers, tonnage 196,225; 24 sailing-vessels, tonnage 3,609: being a total tonnage of 199,834 for the year. The train runs down the wharf, and the coal-trucks, specially made for the purpose, are lifted and emptied into the vessel's hold by means of powerful cranes, of which there are six, with capacities of from 1½ tons to 12 tons, so that every encouragement is given to quick despatch. 190,462 tons of coal, 3,080 tons of coke, 1,282 tons of bricks, and 11,322,731 superficial feet of sawn timber and 154,274 sleepers were exported during the year.

Hokitika: Two training-walls have been constructed, the one on the north side being about 2,000 ft. long, while that on the south is 670 ft. The bar is one of shifting sand, and the depth at high water varies from 9 ft. to 15 ft., while inside the depth is from 6 ft. to 22 ft. for three-quarters of a mile up from the entrance. For ten months out of the twelve the port is usually safe for vessels drawing 8 ft. to 10 ft. of water. The berthage space amounts to 1,000 ft., with from 18 ft. to 22 ft. of water. The principal exports are gold and timber.

Okarito, fifty-five miles south-west of Hokitika: A bar harbour, sometimes completely blocked by a high sand-bank thrown up by heavy seas. When open, the entrance is good, with a maximum depth of 10 ft. There is a small jetty about half a mile from the entrance.

Bruce Bay, ninety-five miles south-west of Hokitika: An open roadstead, well sheltered from the south and south-westerly winds by Heretaniwha Point, which juts out fully a mile to the northward. Good anchorage in 18 ft. of water opposite the Green Rock, which stands up out of the water. Good boat-landing with above winds on a smooth sandy beach.

Paringa River, 104 miles south-west of Hokitika: Open roadstead. Vessels coming in and out should give Hauata Reef (off the north head) a wide berth. There is also a sunken reef, awash at low water, in the middle of the bay, and a

dangerous sunken rock just off the south head, two or three chains away, facing a small sandy bay, and right abreast of the trig. station. Vessels lie inside and a little to the northward of this rock, about a quarter of a mile from shore, and are quite safe with southerly winds.

Haast River, 118 miles south-west of Hokitika: A constantly-shifting bar at entrance, which is nearly opposite and a little to the southward of the Alhambra Rock. This rock stands well out of the water, and vessels entering can go on either side with safety. Average depth of water on bar from 6 ft. to 8 ft.

Okuru and Turnbull Rivers, 138 miles south-west of Hokitika: These rivers join just inside the entrance Good, straight channel; average depth, 8 ft. to 10 ft. The port is well sheltered by Open Bay Islands, which lie about three miles away, just opposite the entrance, bearing a trifle west of north. A dangerous reef lies about two miles and a half from the south-west point of the smaller island, and immediately to the north-west of a line drawn from the last-named point to the extreme end of Jackson's Head.

Jackson's Bay, 153 miles south-west of Hokitika: Good shelter and anchorage, open only to north-east, with 12 ft. of water within a few chains of shore. Jackson's Head runs out about one mile and a half in a north-easterly direction from the southern end of the bay. This is the only ocean harbour on the coast of Westland, and could be converted into a first-class port at comparatively small cost. No doubt Jackson's Bay will eventually form a great coal port, as indications of coal are found from the bay to Tauperikaka, a distance of thirty miles. Moreover, the recent discovery of a practicable pass through the main range, *vid* the Waiatoto and Axius Rivers, will make it in the near future the natural outlet for the Lake Wanaka country.

Big, or Awarua Bay, 200 miles south-west of Hokitika: At the extreme south-west corner of Westland. An open roadstead, sheltered from east and south-west winds; 24 ft. of water on south side anchorage and 30 ft. on north side, just opposite Crayfish Rock, in a spot sheltered from northerly winds.

Steamers have also, in past years, entered the Teremakau, Waitaha, Wataroa, Wanganui, Waiatoto, and Arawata Rivers, all of which have bar-entrances. The Cascade River is likewise navigable, though no steamer has as yet been in; and goods and passengers are also landed at the roadsteads of Saltwater, Gillespie's Beach, and Abbey Rocks.

Towns.

Brunnerton: A borough of about 1,600 inhabitants; is a coal-mining centre. Coke and fire-clay bricks are also manufactured. Railway communication with Greymouth Port, Reefton, and Upper Teremakau.

Greymouth Borough: Population, 3,748; the shipping port for Grey Valley. Railway communication with Reefton, Upper Teremakau, and Hokitika. Railway workshops, foundry, and quarries. The principal business portion of the town is built on Native land, rents being paid to the Public Trustee, who distributes them to Natives entitled thereto.

Kumara: Borough, of 1,121 inhabitants. This is a brisk mining town, and is probably the largest hydraulic-sluicing mining centre in New Zealand. It has two suburbs—Dillmanstown and Larrikin's.

Hokitika: Borough, of 1,946 inhabitants. This is a pretty town, the political capital of Westland, the port for shipping and centre of supply for a number of little townships, and for the whole district south of Teremakau.

Ross: Borough, population 614. A clean and neat little town, the centre of a considerable mining district, with a few good sluicing claims on a large scale.

In addition to the above, there are several small mining centres, such as Stafford Kanieri, Woodstock, Rimu, Blue Spur, Okarito, and Gillespie's.

Mining and Minerals.

The District of Westland contains the greatest area of alluvial auriferous ground on the West Coast.

All the Westland rivers carry more or less gold, but the two great golden rivers are the Arahura and Waiho, the bars and ripples in which appear to be replenished

with fresh deposits of gold after each flood. Standing on the summit of Mount Turiwhate, the ancient beds of the Arahura can be easily traced northward to the Kumara and southward to the Rimu diggings. Similarly the Waiho has, in olden times, flowed both northward down the course of the Okarito River and southward to the Omoeroa River, the lateral terraces in both directions being well defined and gold-bearing.

There are three main gold-bearing deposits in Westland: the first, which may be called riverine leads, run generally westward. These are ancient river-beds, often lying at considerable elevations, of which the bulk has been washed away, leaving detached portions, as at Kumara and Rimu; the second are beach leads, both those along the present coast-line, and others running parallel thereto at distances varying from one-quarter to four miles inland, and at levels from a few feet below to a couple of hundred feet above sea-level; the third are extensive masses of gravel, &c., occurring in large isolated patches, as at Big Dam Hill, Humphrey's Gully, and Bald Hill, north of the Haast. These drifts have all one notable peculiarity, viz., that they invariably coat the seaward faces of the hills, and neither gold nor drift is to be found on the inland slopes. Gold-bearing fans from Mount Greenland have been found at different levels on Ross Flat, having probably been deposited in deep water by sucessive land-slides.

Hydraulic sluicing on a large scale is successfully carried on in various portions of the northern district, and is rapidly being extended to many other localities. Kanieri Lake is being re-utilised, and an abundant quantity of water is now available for the sluicers in the Kanieri Valley. The extension, now proposed, of that race to Back Creek would develop a very large field. The tapping of the Arahura River will, when completed, enable the miners at Blue Spur to obtain an unfailing supply of water, and command a large area of auriferous country, at present unworkable from want of water at a sufficient altitude. A large acreage of alluvial drift has been pegged out as dredging claims. Some companies are at work, with more or less profit; many more are busily erecting plant, while others are completing the preliminary surveys, inspections, and borings essential before placing their properties on the market. Experts are assured that an immense extent of auriferous gravels exists all over the low-lying country which will yield most remunerative returns by this new treatment. Undoubtedly great areas of swampy, undrainable, and hitherto not-available lands will be thoroughly prospected, and it is confidently predicted that valuable finds will be made in such virgin districts. Numerous and costly experiments have been made with dredges of different types in the endeavour to work economically the gold-bearing sands which lie along the sea-beaches for a distance of over 140 miles; but very few have proved a success as yet. A considerable number of miners (black-sanders) work on some of these beaches, and seem to make a fair living, many of them having been so employed in one neighbourhood for over twenty years.

Gold-bearing quartz has been found throughout the district, the most promising finds being at Mount Alexander, Taipo Range, Browning's Pass, and Cedar Creek. Silver ores, associated with gold, have also been found, notably at Rangitoto. Copper lodes have also been discovered throughout the country, the finest outcrop being on the western slopes of the Matakitaki Range, with good seams and beds of coal and limestone adjacent.

THE CANTERBURY LAND DISTRICT.

SIDNEY WEETMAN, Chief Surveyor.

Boundaries—Physical Features.

The Land District of Canterbury comprises the central portion of the Middle Island, and lies between the Conway River, Barefell Pass, and Mt. Franklin on the northward; the Spenser Mountains, Travers Peak, Mt. Barron, the Amuri, Hope, and Hurunui Passes, the summit of the Southern Alps, and the western watershed

of the River Hopkins and Lake Ohau on the westward; the Rivers Ohau and Waitaki on the southward; and the South Pacific Ocean on the eastward. It lies between south latitudes 42° 5′ and 44° 55′, and east longitudes 169° 45′ and 173° 30′. The length of the district north-east and south-west is about 220 miles; the breadth W.N.W. and E.S.E., from the summit of the Alps to the sea, averages seventy miles. The sea-board has a length of about 300 miles, consisting generally of low-lying beaches, broken by the projection eastward of Banks Peninsula, which contains the only large natural harbours. That portion of the district which fronts the ocean between the Ashley and Opihi Rivers is flat land, about 2,500,000 acres in extent; north and south of those limits the plain is interspersed with undulating and hilly country.

This great plain stretches westwards, rising and merging into downs and hills, which again extend westward and merge into the Southern Alps and the offshoots therefrom. Banks Peninsula, which has an area of about 250,000 acres, is wholly composed of ridges and hills, deeply intersected by basins and gullies, the result of volcanic action.

The Southern Alps, which form the backbone of the island, are a continuous chain of mountains, with a succession of magnificent peaks, attaining their culminating point in Mount Cook, or Aorangi, 12,349 ft. above sea-level; there are, besides, numerous peaks ranging in altitude between 7,000 ft. and 10,000 ft. Offshoots, extending to great distances eastward and south-eastward from the main range, attain elevations of 6,000 ft. to 9,000 ft. On these mountain-ranges are numerous and extensive glaciers, from which emanates the river-system of the district, comprising the Waiau-ua, about 100 miles in length; Hurunui, 85 miles; Waimakariri, 90 miles; Rakaia, 85 miles; Ashburton, 64 miles; Rangitata, 74 miles: the Waitaki and its main feeders, 140 miles. These rivers rush down from the mountain-gorges, through the intervening ranges and hills, and traverse the plains to the sea. The channels on the plains are shallow, and extend in some instances over a mile in width.

These rivers serve as outlets for a portion of the Lake system of the Middle Island, Lake Sumner being connected with the Hurunui, Lakes Coleridge and Heron with the Rakaia, and the Mackenzie Country lakes—Tekapo, Pukaki, and Ohau—with the Waitaki. Another important lake is that known as Lake Ellesmere, west of Banks Peninsula; it is separated from the ocean by a narrow shingle-spit only 5 chains across at one point, through which, at certain seasons, the flood waters force a channel to the sea.

Climate.

The climate of Canterbury is well suited to Europeans. It resembles that of Great Britain, but on the plains is far more equable, the mean daily range of temperature being 17·10° Fahr. Observations taken at Lincoln (fourteen miles from Christchurch) for a period of ten years, ending December, 1892, give the following results: Barometer, reduced to 32° Fahr. and sea-level, 30·06 in.; mean maximum daily temperature, 61·47°; mean minimum daily temperature, 43·27°; mean average temperature, 52·37°. The extremes of temperature were 92° and 22° Fahr. The rainfall for the same period averaged 26·809 in. per annum, the extremes being 35·287 in. in 1886 and 14·836 in. in 1890. The average annual number of days on which rain fell was 123, the extremes being 149 in 1887 and 98 in 1891. Snowfalls are very light on the plains, but in the high uplands the climate is much colder and more severe. The changes of weather and temperature are sudden, calms and gales, rain and sunshine, heat and cold alternating. The prevailing winds are north-east, south-west, and north-west—the last a hot wind. The climate, as a whole, is splendidly healthy, bracing, and most enjoyable.

Foundation and Settlement.

The district was occupied, in the first instance, by settlers sent out by the Canterbury Association, which was formed in 1848, and incorporated by Royal Charter in 1849, under the auspices of prominent men in England, including the

Archbishop of Canterbury and Lord Lyttelton. The step was not taken until after due inquiry as to the most suitable part in which to establish a settlement. Captain (afterwards Sir George) Grey, at that time Governor, recommended the Wairarapa, but it was finally decided to take over from the New Zealand Company a tract of the Canterbury Plains, in the neighbourhood of Port Cooper. Captain Thomas, the agent of the association, who had advised the selection, superintended the surveys and the preparations for receiving intending settlers. The original intention of the founders was that the settlement should be independent and complete in itself, and should embrace only such persons as were members of the Church of England and were approved of by the association. This was frustrated by the influx of numbers of persons of all classes and beliefs. The first body of emigrants arrived at Port Cooper on the 16th December, 1850, and the settlement remained under the control of the association, as directed by a committee of management in England, and under the active personal supervision of Mr. John Robert Godley, until 1853, when the whole of Canterbury became a province of New Zealand by the provisions of "The Constitution Act, 1852."

Thenceforward the control of the settlement was vested in the Superintendent and the Provincial Council. The first Superintendent was Mr. James Edward FitzGerald, who held office till 1857; he was followed in succession by Mr. William Sefton Moorhouse, 1857–1863; Mr. Samuel Bealey, 1863–1866; Mr. Moorhouse again till 1868; and Mr. William Rolleston till the abolition of the provinces in 1876, when the district came directly under the control of the General Government.

Internal Communication.

In no part of New Zealand are the means of communication better than in Canterbury. The natural facilities of the country have been abundantly supplemented by railways and roads. Lyttelton, the chief port, is connected by rail with Christchurch, the heart and centre of the whole district. From Christchurch the main line extends northwards to Culverden, a distance of 69 miles; southward the main trunk line runs to Waitaki, 138¾ miles. These lines tap and serve the whole coastal district, and the lands adjoining on the western side. As feeders to these trunk lines, eight branch lines have been constructed westward, and two lines south-eastward; the former, in most instances, extending to the foot of the hills.

Combined with the railway system is a complete network of main, district, and subsidiary roads, extending into all parts of Canterbury. The total length of railways is 455 miles, and the roads probably exceed 10,000 miles in the aggregate. The completion of this splendid system is due, partly to the foresight of the original settlers, partly to the exertions of the Provincial Government, and partly to the railway and public-works policy of the late Sir Julius Vogel.

Geological Formation.

According to Sir James Hector, the main western ranges are composed of Upper Palæozoic rocks, having at their base extensive plains of Tertiary fluviatile formation, with occasional protruding ridges of Upper Mesozoic, forming low mountain-ranges subordinate to the main axis. Banks Peninsula consists of basic volcanic rocks.

Area, Nature, and Disposition of Lands.

The area of the Canterbury Land District is 9,604,045 acres, of which the estimated area of forest-land is 516,030 acres. Forest-lands are found in Banks Peninsula and in the Mount Peel and Waimate districts, where the timber consists chiefly of rimu, totara, and matai; at the sources of the Waiau-ua, Ashley, Waimakariri, Rakaia, and Hopkins Rivers, at Lakes Ohau and Sumner, and near Springfield and Methven, the timber in these localities being mostly native beech; and near Oxford, where the beech is interspersed with rimu, totara, matai, &c.

The lands of Canterbury may be classed approximately as follows: First class, 2,046,071 acres; second class, 5,207,173 acres; third class (barren lands and lands of small value), 2,350,801 acres: total, 9,604,045 acres.

The disposition of lands was in 1901 as follows:—	No. o Holders.	Area in Acres.
1. Crown lands disposed of for cash (including land granted under Midland Railway Act, 416,005 acres, but deducting lands repurchased for settlement—132,689 acres) ...	...	3,873,990
2. Lands held on deferred payments	26	11,640
3. Lands held on perpetual lease	110	10,612
4. Lands held as leaseholds in perpetuity	1,037	200,451
5. Lands held in occupation with right of purchase ...	18	1,413
6. Lands held as village-homestead special settlements ...	361	12,347
7. Lands held as small grazing-runs	73	145,269
8. Lands held as grazing-farms (on Cheviot Estate) ...	40	45,971
9. Pastoral licenses	117	3,517,639
10. Special-settlement associations	38	4,653
11. Reserves and Crown lands held under temporary occupation licenses (area, 106,242 acres, included in 12 and 16)	540	...
12. Area of land reserved and granted under various Acts (exclusive of Midland Railway land, included in 1) ...	...	777,782
13. Land purchased and disposed of under Land for Settlements Acts (included in 4, 7, 10, and 11; 742 holders, 130,919 acres)	...	...
14. Crown lands open for selection	...	5,030
15. Crown lands being prepared for selection	...	...
16. Barren lands, and lands for future disposal	...	997,248
Total	2,360	9,604,045

In explanation, it may be noted that No. 1 comprises the freehold lands conveyed, and that tenants of Nos. 2, 3, and 5 have the right of acquiring the freehold, which is not the case with tenants of Nos. 4, 6, 7, 8, 9, 10, 12, and 13. Crown lands proper are: 14, open for selection; 15, being prepared for selection.

Soils.

The Southern Alps and mountains adjoining are, owing to their great altitude, subject to disintegration, and form for the most part rocky barren wastes.

The lower ranges and hills, the high tablelands, and the light stony portions of the plain form the pastoral areas.

In the northern and southern districts and in the great central plain are the agricultural areas. This latter class of land comprises rich alluvial tracts about Cheviot, Rangiora, Kaiapoi, Lincoln, Ellesmere, Longbeach, Temuka, and Waimate, and the splendid plain- and down-lands which extend from Cheviot to the Waitaki.

Banks Peninsula, where the soil is of a rich volcanic nature, though exceedingly hilly, has alluvial areas in the valleys and about the bays.

Pasturage and Crops.

Below a certain level, the mountainous and hilly regions, and the high upland country in the western and northern part, are covered by native grasses, with an admixture of English forage-plants where the character of the soil and other circumstances are favourable.

The pasturage, which is very suitable for sheep-farming, is taken full advantage of by the pastoral tenants of the Crown, and is used to some extent by freeholders. The light stony portions of the plain also contain native grass lands, well adapted to merino sheep.

The lower hills, downs, and better kinds of plain-country have been widely cultivated, and have proved well fitted for the production both of cereals and of grasses.

The chief crops grown in Canterbury District are wheat, oats, barley, turnips, rape, clover- and grass-seed; while amongst other crops produced are rye, peas, beans, mangolds, beet, carrots, and potatoes.

Of the cereals, wheat is the most largely grown, and was for many years a large item of export. In the season 1900–1901 the area under crop for threshing was 146,668 acres, being over two-thirds of the total wheat area of the colony. The yield was estimated to average 31·75 bushels per acre.

Oats also are very successfully grown, the figures for the same period being 178,024 acres, or about two-fifths of the total area of this crop in the colony. The estimated average yield was 42 bushels per acre.

Barley of superior quality is also produced, the figures being 12,092 acres, equal to about two-fifths of the total area of barley crop in the colony. The average yield was estimated to be 40 bushels per acre.

Grass-seeds are abundantly grown, cocksfoot mainly on the splendid Banks Peninsula country, and ryegrass throughout the land district.

Potatoes, which yield crops of excellent quality, were grown in 1900–1901 on 8,978 acres; turnips and rape were grown on 199,788 acres, and the combined area of other crops grown, including rye, peas, beans, mangolds, beet, carrots, and onions, was 11,505 acres. The area of wheat, oats, and barley for fodder was 55,695 acres. The area ploughed and laid down in English grasses was 1,459,606 acres. Surface-sown lands comprised 322,346 acres. The total area under crop was 612,319 acres, and the area broken up but not in crop, 10,515 acres. Plantations, exclusive of private gardens, occupied an area of 23,435 acres. The aggregate area of private and market gardens, orchards, and vineyards over quarter of an acre in extent was 7,500 acres.

Stock.

The pastoral and agricultural lands provide grazing and fodder for a large number of sheep, cattle, horses, and other stock. Of late years the value of the plains has been much enhanced and the carrying-capacity thereof greatly increased by the water-race system, which supplies water throughout the length and breadth of the dry areas, and enables the country to be occupied in smaller holdings than would otherwise be possible.

The following table shows the extent, cost, and other particulars regarding the water-race system in the several counties in 1901:—

County.	Area watered.	Miles of Races.	Total Cost.	Cost per Acre watered.	Amount of Water distributed every Twenty-four Hours.	Annual Charge for Use of Water.
	Acres.		£	s. d.	Gal.	
Ashley ...	115,000	500	24,000	4 2	27,000,000	From ¾d. to 6d. per acre, in addition to special rates for interest on loans.
Selwyn ...	326,388	1,106	73,636	4 6	90,940,960	8s. 4d. to £1 5s. per 100 acres.
Ashburton	586,000	1,315	39,800	1 4½	86,000,000	From £2 to £3 per mile of race.
Geraldine	71,212	260	9,010	2 6½	29,520,000	About 7d. per acre, including a rate for payment of principal and interest on loans, and a rate for maintenance.
Waimate	35,700	157	8,125	4 7	8,500,000	Races are maintained by an annual charge on the value of lands watered

The sheep in the District of Canterbury, in April, 1900, numbered 4,516,955. In October, 1900, there were 50,015 horses, 93,266 cattle, and 48,858 pigs.

The district has a well-deserved reputation for the classes and splendid quality of its sheep. On the mountains and higher lands the merino still predominates; but on the richer low-lying ranges, hills, and plains the prevailing types are crosses between the merino and Leicester, Lincoln, Romney Marsh, and other breeds. In proof of the superior character of the flocks, pasturage, and climatic conditions in the Middle Island, the following percentages of lambing returns are quoted—these are "fair average returns, but much higher might have been exhibited": Mountain native pasture—pure merino, 75·36; pure merino and Border Leicester, 88·94: English-grass pasture—crossbred and Border Leicester, 80·8; half-bred Border Leicester, 82·79; Border Leicester, 90·77; Lincoln, 88·08; Romney Marsh, 111·46; English Leicester, 93·34; Shropshire, 97·41; Southdowns, 96·87. It must be borne in mind that the flocks and herds are supported by the natural and artificial pastures without housing.

Owing to the development of the frozen-meat trade a great impetus has been given to sheep-breeding. The bulk of the primest meat exported from the colony is supplied by this district, with Marlborough, and commands the highest price in the London markets. In the year ended 30th April, 1901, the number of carcases frozen was 1,584,583, valued at £1,060,787. There were also produced preserved meats to the value of £16,335; 12,420 casks of tallow, valued at £103,056; 6,289 tons of bonedust and manures; besides neatsfoot-oil, oleo, &c.

The total quantity of frozen meat exported from Canterbury during the year ended 31st March, 1901, was 616,924 cwt., valued at £813,208. At Belfast, Fairfield (near Ashburton), Islington, and Timaru, freezing-works are established, each containing a complete plant for carrying on the industry, as well as departments for curing, preserving, boiling-down, tallow rendering, fellmongering, and the manufacture of manures. The Belfast Freezing Works, owned by the Canterbury Frozen Meat and Dairy Produce Export Company, contain engines of 710-horse-power, and employ 300 men. They have storage for 90,000 carcases, and can put through 5,000 carcases in a day. The same company has recently established a new factory at Fairfield (near Ashburton), where 40,000 carcases can be stored and 2,200 dealt with in a day. The Islington and Timaru works, which are owned by the Christchurch Meat Company, employ in all about 750 men, and have engines representing 403-horse-power. The former can put through 6,000 carcases per diem, and have storage for 120,000 carcases. The latter can deal with 4,000 carcases in a day, and have storage for 120,000 carcases. At Hornby there has been established by Messrs. Nelson Brothers (Limited) a well-equipped factory for freezing only, with engines of 300-horse-power, and a capacity of dealing with 1,000 sheep per diem. The factory has storage-room for 50,000 sheep, but is not at present in operation.

Wool.

During the year ended 31st March, 1901, there were shipped at Lyttelton and Timaru 26,982,775 lb. wool, valued at £995,853; and to this must be added the amount (about 1,000,000 lb.), bought for manufacture by the woollen-mills in the district. The Kaiapoi Woollen Manufacturing Company, Limited, owns large woollen mills at Kaiapoi, and clothing factories at Christchurch. These are fitted with modern machinery and appliances, and the company's products have obtained a considerable reputation. The company employs about 1,000 hands, and pays in wages about £58,000 per annum. The value of wool and other local products used during the year 1900 for manufacture was about £50,000. The staple of the New Zealand wool, especially the long-wool and cross-bred, is remarkable for its freedom from breaks and other imperfections. The average clips are approximately as follows: Merino, 4 lb. to 7 lb.; quarter-breds, 6½ lb.; half-breds, 7½ lb.; three-quarters, 8½ lb.; Leicesters, 10½ lb.; Lincoln, 11 lb. From special flocks clips up to 25 lb. and 30 lb. are obtained.

Butter and Cheese.

Banks Peninsula and the rich tracts of country previously mentioned are excellently suited for dairy farming. The pasturage and climatic conditions are favourable, and a great increase in the production of butter and cheese may be

looked for, more especially as housing and hand-feeding are in some districts unnecessary. A central co-operative dairy factory has been established at Addington, served by twelve creameries, situate at Marshlands, Oxford, Halswell, Springston, Doyleston, Little River, Ladbrooks, Lakeside, Kaiapoi, Green Park, Brookside and Ashburton, each capable of dealing with the milk of 1,000 cows. There are also very complete dairy factories at Taitapu, Sefton, Temuka, Southbrook, Belfast, Tinwald and Le Bon's Bay, as well as a cheese-factory at Flemington.

Timber.

The sawmilling industry finds its development chiefly in the Oxford, Little River, Mount Somers, and Waimate districts. The number of mills in Canterbury in 1896 was twenty-two, employing 232 hands, the horse-power being 318. The output in 1895 was 3,697,230 ft., valued at £17,608. The number is, however, diminishing, owing to the working-out of the available timber. The timber comprises birch, totara, red- and white-pine. The first-named is used chiefly for sleepers and fencing, the totara and pine for building purposes. Including the work done by the planing- and moulding-mills the value of all the manufactures under this head was £26,154.

Fruit.

The district is eminently adapted for the growth of a large variety of fruits, especially all that flourish in Great Britain. Attention has recently been directed to landing supplies of fruit in London; the attempts so far have proved satisfactory, and point to the possibility of a large trade being established.

Coal.

Brown coal is found at the Malvern Hills, Homebush, Whitecliffs, Springfield, Mount Somers, Albury, and various other places. Lignite is also commonly distributed. For the year 1900, the output from 15 colleries, employing about 50 hands, was 14,162 tons, bringing the total amount raised from 24 collieries up to the 31st December, 1900, to 383,386 tons. The seams worked vary from 16 ft. to 2 ft. 3 in., the average width being 8 ft. At Acheron, near Lake Coleridge, a true anthracite is found, the other pits in the district being of brown coal or lignite.

Building-stones.

The building-stones of Canterbury comprise some excellent varieties. The Halswell quarries produce an exceedingly hard and close-grained stone of a dull leaden-grey colour. Granular trachytes are obtained from Governor's Bay, Lyttelton; porphyrites at Malvern Hills; good limestone at Malvern Hills, Waikari, Mount Somers, and various other places; bluestone rock is found at Timaru suitable for millstones. There is abundance of limestone in North Canterbury, Mount Somers, Castle Hill, and various other parts, which is well adapted for making lime.

Fisheries.

Deep-sea fishing is carried on from Lyttelton and Akaroa, the kinds of fish chiefly caught being groper (hapuku), ling, conger, moki, butterfish, barracouta, soles, whiting, red-cod, herrings, and garfish. From Lake Ellesmere and the river estuaries excellent flounders are obtained. In 1896 there were employed on the lake and along the coast 68 boats, manned by 105 men.

Trout thrive amazingly in the rivers and fresh-water lakes, affording excellent sport.

Manufactories.

Excluding mines and quarries, the total number of manufactories in Canterbury at the date of the census in 1896 was 448, employing 4,944 males and 1,110 females.

Included in the above were 20 printing, 9 agricultural-implement, 27 coach-building and -painting, 29 fellmongering, tanning, currying, and wool-scouring establishments, 5 ship- and boat-building works, 12 sail- and oilskin-factories, 3 woollen-mills, 5 clothing, 17 boot-and-shoe factories, 4 rope-and-twine works, 5

flax-mills, 5 boiling-down, meat-preserving, and freezing works, 14 cheese- and butter-factories, 32 grain-mills, 3 fruit- and jam-making works, 16 breweries, 10 malt-houses, 30 aerated waters and cordial works, 6 sauce- and pickle-making factories, 5 soap- and candle-works, 22 sawmills and sash-and-door factories, 4 gas-works, 15 brick, tile, and pottery manufactories, and 10 iron- and brass-foundries.

The census returns also showed that in 1895, the value of land, machinery, and buildings used for factory purposes was £1,178,112, and the total value of manufactures £2,629,822.

Libraries and Churches.

As an indication of the progress of the district, it may be noted that there were in April, 1896, seventy-three public libraries, mechanics' institutes, and scientific institutions, with a membership of 3,647; and 277 churches or chapels, attended by 42,615 persons.

Educational Institutions.

Primary Schools.—The district is divided into two parts, termed North and South Canterbury, each presided over by an Educational Board. Under the control of the Boards schools have been established throughout the whole country wherever population warrants their erection.

The number of children attending the public primary schools in Canterbury, on 31st December, 1900, was 25,245. Average daily attendance, 20,893. Number of teachers—males, 262; females, 374: total, 636. Number of schools, 270.

There is a Normal School at Christchurch for the training of teachers.

Secondary Education.—For the further education of children ample provision has been made by the establishment of secondary schools. The principal schools of this class are the Boys' and Girls' High Schools at Christchurch, Rangiora, Ashburton, Timaru, Waimate, Akaroa, and Temuka. For more advanced students Canterbury College, Christchurch, is available. This institution was founded and endowed by the Provincial Government in 1873. It is presided over by a Board of Governors. The teaching staff comprises twelve professors and lecturers, and the number of students attending lectures is over 300.

It should be recorded here that the Provincial Government of Canterbury was fully alive to its duties as regards higher education. It made reserves for the purpose of endowment for the following objects: (1) College, 101,640 acres, reserved June, 1873; (2) technical science, 103,000 acres, reserved July, 1873; (3) School of Agriculture, 100,950 acres, reserved June, 1873; (4) Boys' High School, 9,220 acres, reserved at various dates; (5) Classical School, 8,953 acres, reserved at various dates. To these were subsequently added the following: (6) Girls' High School, 2,578 acres, reserved January, 1878; (7) Medical School, 5,000 acres, reserved December, 1877.

Primary Schools.—There are numerous private schools, independent of the State, the chief amongst them being Christ's College, Christchurch, connected with the Church of England. The Roman Catholics support schools of their own in Christchurch, Pleasant Point, Lyttelton, Timaru, Addington, Papanui, Ashburton, Akaroa, Rangiora, Sheffield, Temuka, Leeston, and Waimate. There are besides, in Christchurch, some excellent private boarding- and day-schools for both boys and girls.

Other Institutions.

Canterbury has the advantage of possessing many flourishing public institutions. The School of Art, Christchurch, was established by the College Governors in 1882; the Art Gallery owes its origin to the Art Society, the site being the gift of the Government. The Canterbury Agricultural College, Lincoln, also founded by the College Governors, is surrounded by 660 acres of land. The commodious buildings, which cost over £20,000, provide accommodation for the Director and teaching-staff, and for forty-five students. The fees are on a low scale. The farm buildings are complete, and include a well-equipped dairy. Instruction is given in agriculture, chemistry, botany, mechanics, physics, surveying, &c.

The Public Library, Christchurch, under the control of the College Governors, contains reading-rooms, a circulating library of 19,235 books, and a reference

library of 12,872 volumes. Numbers of magazines and newspapers are provided. The number of subscribers is 1,865, and the average daily attendance between 900 and 1,000.

The Museum, Christchurch, is a handsome pile of stone buildings; the collections are large and varied. They are separated into two groups: (1) Those from New Zealand; (2) those from foreign countries. In the New Zealand department the skeletons of whales and moas, as well as the collections of shells (tertiary and fossils) and rocks, are specially good; and the Maori collection, exhibited in a Maori house, is also of considerable interest. In the foreign department, the geological, mineralogical, and ethnological collections are the most extensive, but there is also a good illustrative series of Egyptian and Roman antiquities, as well as of the remains of prehistoric man in Europe and America.

This institution owes its origin and success to the foresight, skill, and energy of the late Sir Julius von Haast, and to the munificence of the Provincial Government.

The philanthropic institutions embrace the Christchurch, Akaroa, Ashburton, Timaru, and Waimate Hospitals; the Sunnyside Asylum for the Insane; the Rhodes Convalescent Home; the Memorial Home for the Aged at Woolston; the City Mission and Destitute Men's Home, Christchurch; the Deaf-and-Dumb Asylum at Sumner; the Orphanage, Lyttelton; the Industrial School at Burnham; and the Mount Magdala Asylum, Samaritan Home, and St. Mary's Home, in the vicinity of Christchurch.

Towns.

Christchurch, the capital city of the Canterbury District, is situated on the plains. It is practically level, laid out in rectangular form, two miles by one mile and a quarter, and is intersected diagonally by a street. The streets are 66 ft. in width. There are numerous open spaces, including the Cathedral Square in the centre, and Cranmer and Latimer Squares. The Avon, a pretty stream, overhung by willows, runs through the town, presenting from all points charming vistas. The city is surprisingly English in its appearance, architecture, and surroundings. The central portion, where stands the Cathedral, Government offices, and other substantial structures, has a handsome, well-built look. Other parts contain fine public buildings, such as the Museum, Canterbury College, High Schools, &c. The whole is admirably set off by Hagley Park, 400 acres in extent, the Domain and Botanical Gardens, 79 acres, Lancaster Park, the Town Belts, and other public and private gardens and plantations. The suburbs can show many handsome houses and beautifully kept grounds.

The city is surrounded by the populous boroughs and districts of Sydenham, St. Albans, Linwood, Papanui, Woolston, &c. The population of the city was at the last census (March, 1901) 17,538, in about 4,000 houses; including the adjacent boroughs and other suburbs the population amounts to about 57,000. Tramways connect the city with the suburbs of Addington, Sydenham, the Port Hills, and Papanui, and with the seaside villages of New Brighton and Sumner. The city has been drained at considerable expense, the sewage being conveyed three miles and discharged on the sand wastes near the sea. A pure and copious water-supply has been provided by nature, and is obtained by artesian wells. The affairs of the municipality are controlled by the City Council, presided over by the Mayor. Christchurch is the centre of trade and commerce for the North Canterbury agricultural and pastoral country, and the headquarters of many manufacturing industries, including carriage, boot, and clothing-factories, flour-mills, breweries, meat-preserving and -freezing, biscuit, planing and moulding, bicycle, and other works.

There are large and well-equipped show-grounds at Addington.

The Canterbury Agricultural and Pastoral Association and the Industrial Association, operating through a public company, have recently erected a fine block of buildings in brick and stone, comprising a large hall capable of seating three thousand persons (and known as the Canterbury Hall), together with smaller halls and suites of offices. It is proposed to establish an industrial and agricultural museum of a permanent character in the building, which should form a most useful reference to the productions and capabilities of the district. The opening of the

building was inaugurated by the holding of the "Canterbury Jubilee Industrial Exhibition, 1900," commemorating the establishment of the province fifty years before, and forming an excellent index to the progress of the district since that time. The exhibition was confined to colonial products, but the bulk of the exhibits were produced in the district. It remained open for three months—from the 1st November, 1900, to the 31st January, 1901—was visited during that time by about 250,000 persons, and yielded a profit to the Industrial Association as promoters of of about £3,000.

Recreation and amusement are provided for by the Canterbury Hall (already referred to), Theatre Royal, Opera House, and various public halls, the famous Riccarton racecourse, the numerous cricket and football grounds, &c., while boating men have the River Avon and the Heathcote estuary.

Christchurch is connected with the outside world by Port Lyttelton, seven miles distant. The railway-tunnel of 1⅞ miles in length, through the Port Hills, is on this line. Christchurch is not only the centre of the splendid Canterbury Plains, but is also one of the chief railway centres of the colony. Addington railway-workshops are extensive and fully equipped.

Lyttelton, the chief port of the district, is situated on the northern shores of the inlet of that name, sometimes called Port Cooper. The surrounding country consists of high precipitous hills, which separate the harbour from Christchurch and the plains; but by the construction of the railway and tunnel the natural difficulties have been overcome, with the result that the whole of the imports and exports of northern and central Canterbury pass through Lyttelton. The origination and accomplishment of this great engineering work is due to the late William Sefton Moorhouse, at that time Superintendent of the Province. The natural advantages of the port have been enhanced by reclamation and harbour-works, which include two breakwaters, 2,010 ft. and 1,400 ft. in length respectively, extending from Officer and Naval Points, enclosing about 107 acres; long lengths of wharf accommodation, 10,041 ft.; a patent slip for ships up to 400 tons; and a splendid graving-dock 450 ft. long, width on top and bottom 82 ft. and 46 ft. respectively, the entrance being 62ft. wide, well equipped with machinery and all requisites for repairs. Ships drawing up to 25 ft. can berth alongside the spacious wharves and sheds. The railway, electric-light, machinery, and appliances are available throughout, which renders loading and unloading practicable both by day and by night. As an indication of the volume of trade dealt with at the port, it may be noted that for the year ended March 31, 1901, the imports were valued at £1,863,548 and the exports at £2,259,578. The town nestles on the side of the range, the streets being generally steep, flanked by solid stone buildings; and a background of green spurs and bold rocky faces gives to the whole a charming and picturesque appearance. The water-supply is obtained from artesian wells on the Christchurch side of the hills. To Christchurch there is a bridle-track over the range, and a carriage-road *vid* Sumner. The harbour is well defended by fortifications and batteries on Ripa Island and the mainland. The population at last census was 4,023 persons.

Timaru, the third town in importance, is situated on the coast and railway-line between Christchurch (100 miles) and Dunedin (131 miles). The boundaries of this borough were extended in 1898, the estimated area, including town belt, being now 1,100 acres. It has a well-constructed artificial harbour, the port of shipment for the agricultural and pastoral districts of Geraldine, Timaru, and Waimate. The harbour is enclosed by a breakwater built of blocks of concrete; a rubble wall—the North Mole—starts from the shore a quarter of a mile away to the north, and extends easterly to a point 350 ft. from the breakwater. The enclosed space is 50 acres. During the year ended March 31, 1901, the value of goods imported here was £173,087 and of produce exported £714,855. The town is picturesquely situated on rolling hills overlooking the sea. The streets are irregular, but the public and commercial buildings, churches, and private houses are generally well and handsomely built of stone. The chief industries are meat-freezing, saw-milling, flour-milling, &c. The town has a good high-pressure water-supply, and is connected by well-made roads with the surrounding districts, and by rail with Fairlie, the route to the Mackenzie Country and Mount Cook. The population at last census was 6,424 persons.

Of other towns in Canterbury the following deserve mention: Rangiora, population, 1,768 persons, twenty miles from Christchurch by northern line of railway, is situated in the centre of a fine farming country, and possesses manufactories, including seven flax-mills, flour-mill, and brewery. The town and neighbourhood are much benefited by plantations.

Kaiapoi, on the Waimakariri, population 1,795, about fourteen miles from Christchurch by the northern railway-line, lies in a rich farming country, rendered pleasing and attractive by the extent and variety of plantations and gardens. There are factories and various industries, including ham- and bacon-curing, sawmills, brewery, and agricultural-implement works. Here also is the famed Kaiapoi Woollen-mill, which employs 600 hands when trade is brisk. The Waimakariri is navigable for small vessels to the centre of the town.

Ashburton, the newest of the towns, has a population of 2,322, and is fifty-three miles from Christchurch on the southern trunk line. It is a well-built town, with extensive and beautiful recreation-grounds and gardens. It owes its existence to the settlement of the plains, the surrounding country being well adapted for farming. There are two breweries, meat-freezing works, a cordial-factory, three flour-mills, gasworks, ironworks, woollen-mill, brickworks, &c.

Geraldine, population 868, is situated on the Waihi River, four miles from Orari Railway-station, about eighty-six miles south-west from Christchurch. It is a neat and pretty town, in a first-class farming district, and has a beautiful park of native forest-trees.

Temuka, eighty-eight miles from Christchurch, on the southern railway-line, is a well-built town, with good agricultural land all round. It possesses three flour-mills, a butter- and cheese-factory, brewery, foundry, fellmongery and paper-mill. There is a beautiful park and domain. The population of the borough is 1,465 persons.

Waimate, population 1,359, is situated on the Waihao Forks Railway, about four miles from Studholme Junction, some 111 miles from both Christchurch and Dunedin. This town is the centre for an extensive back-country, and a splendid agricultural area. It owes its origin to the sawmill industry of the Waimate bush. Industries: saw-milling, flour-milling, &c.

Akaroa, population 559, situated on the noble harbour of that name, was founded in 1840, in the first instance by the French. It is a quiet, picturesque little place, much patronised by Christchurch residents and others as a summer resort and watering-place. It was here that Captain Stanley hoisted the British flag on 11th August, 1840, when he took possession of the Middle Island on behalf of the Crown, forestalling the French by a few hours only. A suitable obelisk commemorating this event has been erected on the spot.

THE OTAGO LAND DISTRICT.

DAVID BARRON, Commissioner of Crown Lands and Chief Surveyor.

Boundaries and Area.

The Otago Land District lies between the 44th and 47th parallels of south latitude, and extends from 167° 20′ to 171° 10′ of east longitude. It is bounded on the north by the Canterbury Land District; on the south-east and south by the ocean; on the west and south by the Waikawa, Mokoreta, Slopedown, Waikaka, Chatton, Weudon, Waikaia, Gap, Rockyside, and Kingston Survey Districts, the western and southern shores of Lake Wakatipu, the Mid-Wakatipu, Mavora, Swinton, Eglinton, Arran, and Doon Survey Districts, and a straight line from the north-east corner of the last-mentioned district to the nearest arm of George Sound, and by George Sound to the ocean; and on the north-west by the ocean to Big Bay.

The district measures about 160 miles from Milford Sound on the west coast to Waikouaiti Bay on the east coast, and the same distance from north to south. Its area is 9,482,800 acres.

Physical Description.

The country generally is mountainous, the highest land being to the north-west, and culminating in Mount Aspiring, 9,960 ft. above the level of the sea.

The west coast mountains are remarkably rugged and grand; and of the thirteen sounds that pierce this coast, three are within the limits of the Otago Land District, the remaining ten being on the west coast of the Southland District. These three are Milford Sound, Bligh Sound, and George Sound. Milford Sound, though only eight miles in length, contains some of the grandest scenery in the world; and fourteen miles inland from its head is the great Sutherland Waterfall, 1,904 ft. high, possibly the highest waterfall known. Bligh Sound is smaller than Milford, and not nearly so interesting; but George Sound is larger, and very picturesque.

A tourist track has been opened from the head of Te Anau Lake to Milford Sound, and a practicable route has also been discovered, and a track formed, from the north-west arm of the middle fiord of Te Anau Lake to the head of George Sound.

Te Anau Track.—A guide works on this track from December to April. He carries a fortnightly mail between Lake Te Anau and Milford Sound, and also meets each trip of the "Waikare." There is ample accommodation for tourists who wish to make the journey in short stages, as there are huts erected at six different places on the track.

For nearly one hundred miles inland from the west coast the country is very mountainous, but at a distance of sixty or seventy miles from the south-east coast-line it begins to get gradually lower, taking the form of rolling hills and downs along the sea-shore.

Rivers and Lakes.

The largest rivers are the Clutha, Taieri, and Waitaki: the first-named drains Lakes Wakatipu, Wanaka, and Hawea; the last, Lakes Ohau, Pukaki, and Tekapo, in the Canterbury District. Te Anau, the largest lake in the Middle Island, lies partly in the Otago and partly in the Southland District. The dimensions of these lakes are as follows:—

Lakes.	Length in Miles.	General Breadth in Miles.	Area in Square Miles.	Height above Sea-level in Feet.
Te Anau ...	38	1 to 6	132	694
Wakatipu ...	50	1 to 3½	114	1,069
Wanaka ...	29	1 to 3	75	928
Hawea ...	19	3	48	1,062
Ohau ...	11	1 to 3	23	1,720
Pukaki ...	11	2½ to 5	31	1,588
Tekapo ...	15	1 to 3½	32½	2,325

These lakes are situated in mountainous country; they are of glacial origin, and all very deep.

The Clutha River is the largest in New Zealand, and is estimated to discharge over 1,000,000 cubic feet per minute. It has a rapid current, but is navigable for small steamers for a distance of forty miles from its mouth. The Waitaki is not a navigable river. For some seventeen miles from its mouth the Taieri River is affected by tides, which run up one branch into Waihola Lake, and up the other branch as far as Allanton (Greytown).

There is a small steamer on Waihola Lake, and another on the Taieri River at Henley. During the summer season both run excursion trips to the mouth of the river when required. The distance in each case is about eight miles.

Plains.

There are some considerable areas of tolerably level land in the interior, the largest being the Maniototo Plains, the Idaburn, Manuherikia, and Upper Clutha

Valleys. Their dimensions are approximately as follows: Maniototo Plains, length, twenty-eight miles; average breadth, ten miles; Idaburn Valley, twenty-five miles by four miles; Manuherikia Valley, thirty-five miles by four miles; Upper Clutha Valley, thirty-three miles by five miles.

The Taieri Plain, nearer the coast, is about the same size as the Idaburn Valley, and is very fertile. Other plains are the Waitaki in the north, the Tokomairiro, the Strath-Taieri, the Tapanui, and the fertile Inch-Clutha, lying between the two branches of the Clutha River, and consisting entirely of alluvial deposit. There is also a good deal of low country, chiefly rolling downs, on the south-west side of the Clutha near the sea.

Forests.

The forest-land lies mostly along the sea-coast, the largest area of bush being Tautuku Forest, about forty miles in length and fifteen miles in breadth. The western part of this forest is in the Southland District. The other principal forest areas are in the following localities, viz.: north of Dunedin, east of the Tapanui mountains, in the upper valley of the Waikaia River, and towards the north-west coast.

The forests of Otago contain a large variety of useful timber, both hard and soft wood; some being suitable for building purposes, while other varieties are highly ornamental, and much prized for cabinet-work.

Building Stones.

Building-stones of good quality are found in various places throughout Otago. The Port Chalmers quarries afford an inexhaustible supply of bluestone, a basaltic stone of great hardness and durability; and the neighbourhood of Hindon furnishes a bluestone of superior quality. A hard freestone of excellent quality is found at Waikawa, where there is a large hill of it close to the water's edge. Blocks of very great size can be obtained. There is also a freestone of superior quality on the late Hon. W. J. M. Larnach's property on the Peninsula. A dense dark granite is obtainable on Ruapuke Island; specimens, both tooled and polished, may be seen in the base and pilasters of the new Government Life Insurance Buildings at Dunedin. A soft white building-stone—the well-known Oamaru limestone—is found in large quantities along the railway-line near Oamaru, from whence a good deal is exported to other parts of New Zealand and to the neighbouring colonies. A similar kind of stone is found at Otekaike, about two miles from the railway-station, and it may be interesting to note that during the years 1891–93 about 3,000 tons of stone were sent from the Otekaike quarries to form the facings of the Melbourne Fish-market.

Limestone for Burning.

Limestone is found in the following places: Oamaru, Otekaike, Otepopo, Waihemo Maniototo Plains, Waikouaiti, Lower Harbour, Peninsula, Waihola, Millburn, and Wakatipu.

The Millburn Lime and Cement Company burn large quantities of lime at their Millburn works, from whence it is sent to all parts of Otago, for building purposes, gasworks, &c. It is also largely used in farming, and the productiveness of the Tokomairiro Plain has been greatly increased of late years by its application to the soil. Large cement-works belonging to the same company have been open for some years on the reclaimed land in Otago Harbour, near Dunedin. The cement manufactured at these works is considered fully equal, if not superior, to the best imported, and is largely used in building and other constructive works.

The Government have constructed a branch railway to the lime deposits on the Makareao Estate, Waihemo, having tested the same with satisfactory results, the lime produced being of exceptionally good quality.

Coal and Lignite.

No first-class coals have yet been discovered in Otago suitable for ocean-going steamships. In the southern portion of the district and in part of Southland thin seams of coal of a bituminous character exist, but so far nothing of a commercial

character has been found. These coals are of Mezozoic age. First-class brown coals are worked in several parts of Otago and Southland, the principal seats of the industry being Shag Point, Green Island, Kaitangata, and Nightcaps. Considerable quantities of coal are now being mined in Central Otago, the dredging requirements having directed the attention of miners and others to the deposits of brown coal found in almost every district.

Beds of lignite are also found in numerous localities, chiefly round the margins of the old lake-basins and along the courses of the older river-valleys, and are worked on a small scale to supply local demands.

The output of coal and lignite in Otago and Southland for 1900 was 325,342 tons, an increase of 27,375 tons on previous year.

Climate.

The climate of Otago varies greatly in different neighbourhoods, and sometimes a distance of a few miles only separates districts very dissimilar in this respect. A large area in the interior of Otago has what may be called a dry climate. This area includes the Maniototo Plains, the Idaburn and Manuherikia Valleys, and extends to Lakes Wakatipu, Wanaka, Hawea, and Ohau on the west and north, and to the Waitaki River on the north-east. From Oamaru the direction would be across country to the Lammerlaw Ranges, and thence to Mount Benger and the southern end of Lake Wakatipu. This part of the country is well adapted for sheep of all kinds, especially merinos. Some of the runs in the hilly country are capable of carrying 20,000 sheep.

West Coast.

In marked contrast to central Otago is the West Coast District, which may be described as having a wet climate. Not that the number of wet days in the year is very great, but it is subject to very heavy rains from the north-west, the fall generally exceeding 100 in. per annum. But, although wet, the climate is mild, and the vegetation is consequently luxuriant. The only settlers of this part of the country are Mr. and Mrs. Sutherland, who keep a house of accommodation for tourists at the head of Milford Sound. There are very few visitors to the Sounds during winter, but in summer the tourist traffic is considerable. Towards the south-east and south coasts of the district the climate is moist, being somewhat similar to that of Dunedin, where the average rainfall is 35 in., distributed over 163 days in the year.

Fruit.

There are some fine fruit-growing districts in the valley of the Clutha, from below Roxburgh right up to Lake Wanaka. The summers are dry and warm, and the soil suitable. Apricots, peaches, &c., come to maturity fully a month before they do at Dunedin, and grapes ripen in the open air. There is a great future for this neighbourhood in the growing of those varieties of fruit which agree with and thrive in a dry climate. The grape might be cultivated either for wine-making or for the table, and some varieties could be made into good raisins. The dryness of the atmosphere is favourable for preserving all kinds of fruit, while the Otago Central Railway will bring the neighbourhood into direct communication with a market.

Crops.

Cereals of all kinds do very well over nearly the whole of the provincial district, which includes Southland. The following are the agricultural statistics:—

Total area under cultivation in the provincial district, including sown grasses and fallow land, 2,245,083 acres. Corn crops sown or intended to be sown this season for threshing, comprising wheat, oats, barley, rye, maize, peas, beans, 271,538 acres; land broken up and grassed, 1,378,243 acres, and 4,596 acres in clover, while 275,522 acres have been surface-sown with grass without the land being first broken up; green-crops, comprising potatoes, turnips, mangolds, rape, beet, carrots, &c., 205,968 acres; plantations, &c., including private gardens, market gardens, orchards, and vineyards of a quarter-acre and upwards, 10,950 acres, and 33,393

acres ploughed but not planted. The area in tussock, or native grass, is 8,011,167 acres.

	Acres.	Estimated Yield per Acre.	Total.
Wheat for threshing ...	44,210	33 bushels	1,460,252 bushels.
Oats ,, ...	219,475	44 ,,	9,677,120 ,,
Barley ,, ...	6,800	33 ,,	226,521 ,,

Stock.

The total number of sheep in Otago Provincial District, which includes Southland, on the 30th April, 1900, was 3,746,750, of which number about 700,000 were merinos. On an average, about one-third of the flocks consist of breeding-ewes. The shearing is mostly done by hand, but the Wolseley shearing-machines have been introduced on about ten stations, the number of machines in each wool-shed varying generally from ten to fifteen, though there is one shed at Benmore, near Lake Ohau, where there are twenty-eight machines driven by a turbine.

The above-mentioned district had also, in October last, 54,688 horses; 71 mules and asses; 186,103 cattle; and 37,058 pigs.

The rabbit-pest is still a severe tax on the stockowners; the weight of skins exported last year from Otago being 713,600 lb.; the monetary value being £37,120

Freezing Establishments.

There are nine meat-freezing and preserving-works in Otago. The principal freezing establishments are at Oamaru, at Burnside, and at Port Chalmers. At Oamaru there are two Bell-Coleman machines, and a 60-ton Hercules refrigerator, capable of freezing 1,200 sheep a day, and there is storage-room for 20,000 carcases. At Burnside there are two Haslam machines, both driven by steam. One can supply 40,000 cubic feet of cold air per hour, and the other 60,000. Also a 70-ton Hercules machine, capable of freezing 2,000 carcases per day, and having storage-room for 30,000 carcases. The Port Chalmers freezing-works, erected in 1896 by the Otago Dock Trust, cost £4,500. They are used principally for the storage of butter prior to shipment, but the freezing-chambers have also been used for sheep, rabbits, and fish. The refrigerating machinery includes a 12-ton Hercules refrigerator. The capacity of the building is 30,000 cubic feet, and 50 tons of butter can be handled per week. The capacity has lately been nearly trebled, at an additional cost of £8,500. These additions include a 35-ton Hercules refrigerator.

Woollen-mills.

There are five woollen-mills at work in Otago, employing some 800 hands. The amount paid in wages is about £51,300 per annum, and the machinery is 800-horse-power. £80,000 worth of wool and other materials are used per annum, and the turn-out of manufactured goods exceeds £175,000 yearly. The woollen industry in Otago is of greater magnitude than in any other district of New Zealand, notwithstanding the fact that the Bruce Woollen-mill, one of the newest and smallest, was totally destroyed by fire on the 28th April, 1901.

Besides supplying local needs Otago Provincial District exported last year 21,227,048 lb. of wool, having a value of £800,323.

Clothing-factories.

In clothing-factories, also, Otago takes a prominent place, having nine, employing 700 hands, whose wages amount to £28,000 per annum.

Dairy Factories.

The dairying industry is steadily increasing in Otago. Several new factories have been erected, and the Taieri and Peninsula Factory has extended its creameries to various outlying districts, down to Inchclutha in the south, in Otago central, and right up to the Oamaru District. Their supply is increasing. Through the flush of the season they make seven to eight tons of butter per day, and through the rest of the season never much less than two tons a day.

The bulk of the butter in Otago is theirs, and the quality is very highly appreciated in the London market. The export of butter from Otago this year is about nine hundred tons, and of cheese two thousand two hundred and fifty tons, showing a considerable increase. Prices have ruled high, and dairymen have been much encouraged, and next year several new cheese-factories will be in operation. Most of the dairy factories, indeed nearly all, are co-operative, the whole proceeds, less expenses, being divided among the milk-suppliers. The Taieri and Peninsula Milk-supply Company is a most admirable example of well-managed and therefore highly successful co-operation.

Gold Production.

Otago produces about one-third of all the gold taken out in New Zealand. The number of Europeans engaged last year was 4,166, and number of Chinese, 851.

Gold is found very generally distributed throughout Otago, except in the southern portion of the district. The principal localities are: Clutha Valley, Tuapeka, Shotover, Cardrona, Tinker's, St. Bathan's, Mount Ida, Nevis, Bannockburn, and Maerewhenua.

Last financial year the Otago Provincial District produced 135,753 oz. of gold, having a value of £548,444.

Chief Towns.

The following are the chief towns of Otago, with their population, including all having 1,000 inhabitants and upwards: Dunedin, and suburbs, 52,390; Oamaru, 4,836; Port Chalmers, 2,056; Mosgiel, 1,463; Milton, 1,241; Kaitangata, 1,463; Lawrence, 1,159; Balclutha, 1,017.

City of Dunedin.

Dunedin, the capital city of Otago, is situated at the head of Otago Harbour, which is divided into two parts—the upper and lower. The lower harbour is six miles long from Taiaroa Heads to Port Chalmers. The upper harbour, from Port Chalmers to Dunedin, is seven miles in length. Dunedin and Port Chalmers are also connected by railway.

Although the hills surrounding Dunedin are rather tame in character and outline, the city itself is picturesquely situated. The business part of it is on level land near the harbour, and the residences occupy the sloping hills which rise on the west side of the city. The city proper is about two miles and a half long by seven-eighths of a mile wide, and is bounded on the land side by what is called the Town Belt. This reserve averages one-fifth of a mile in width, and comprises 500 acres, a great part of which is virgin bush. A pretty road, called the Queen's Drive, has been laid out through the Belt from end to end, from which many fine views of the town and harbour can be obtained.

It is thirteen miles down the harbour to the Heads in a north-easterly direction, but the Ocean Beach, lying to the south-east, is only two miles from the centre of the city, and the favourite seaside resort—St. Clair—is about three miles. Trams run to both these places at short intervals. The city is also connected with the suburban boroughs, lying on the hills overlooking the town, by excellent cable-tramways. The Botanical Gardens to the north of the city are well laid out, the native bush contrasting with the cultivated parts. The Reservoir also, which is within easy walking distance, and the drive to Blueskin Bay, have many beauties.

Dunedin is well supplied with elementary schools, there being six large schools in the city proper, with an attendance of 3,400 pupils, and eight more in the suburbs, with 3,600 pupils.

There is also in Dunedin a training-college for teachers. The students in training number six men and twenty-one women. They devote every fifth week during the session to practice in teaching and management of classes in the ten associated schools of the city and suburbs.

The School of Art and Design is in the same building as the Normal School, and has a staff of five teachers and a pupil-teacher. In 1900 there were 395 students in attendance.

The Otago Boys' High School stands on a commanding plateau 300 ft. above the business part of the city and the harbour. The school was opened on the 3rd

August, 1863, in the building in Dowling Street now occupied as the Girls' High School. The new buildings were opened by the late Sir William Jervois, Governor, in February, 1885. The teaching staff, including the Rector, numbers ten; the attendance is about 189.

The Otago Girls' High School was opened on the 6th February, 1871, with a roll of 78 pupils. The present attendance is 124, with a teaching staff of 12, including visiting teachers. Otago holds the proud distinction of having established the first Girls' High School in the Australasian Colonies. Among the earnest band of workers who laboured to establish this first High School for girls the name of Miss Dalrymple stands preeminent, and will ever be held in grateful remembrance by the people of Otago.

The Otago University was founded in 1869, and opened in 1871. It is well housed in a handsome pile of buildings in the domestic Gothic style. There are four separate faculties in the University—viz., Arts and Science, Law, Medicine, and Mining. The School of Medicine provides the full course for a Medical degree of the University of New Zealand. There is a Medical Museum in the University buildings containing anatomical, pathological, and other preparations and models. The teaching staff numbers at present twenty-three professors and lecturers. The School of Mines occupies a separate (temporary) building. There are at present about sixty students going through the prescribed courses for the diplomas and certificates in the Mining, Metallurgical, Geological, Mine and Land-surveying and the Assaying Divisions. Of undergraduates keeping terms there are 257—viz., 203 men and 54 women. The University Library contains over 5,000 specially selected volumes, and is open to the public under certain conditions for purposes of reference. The Chemical and Physical Laboratories are well fitted up, and furnished with all necessary instruments and appliances. There are six scholarships tenable at the University, ranging in value from £15 to £30 per annum.

The public Museum, of which the Professor of Biology is Curator, is under the control of the University Council. It is situated in Great King Street, about five minutes' walk from the University. There is an Art gallery attached, which contains some good works of art. Up to the present time only the central portion of the original design for the Museum building has been erected.

The Dunedin Athenæum and Mechanics' Institute possesses a fine library of over 17,000 volumes, and a membership of over 950 subscribers. Besides the Circulating Library there is a Reference Library, and two good reading-rooms, well supplied with newspapers and magazines.

There are some fine specimens of architecture in Dunedin, the buildings for the most part having an air of permanence and solidity. Some of the churches are very handsome. The First Church, in Moray Place, and Knox Church, in George street, are both handsome stone structures, and St. Joseph's Cathedral (Roman Catholic) is built of stone in the decorated Gothic style. The portion at present constructed will seat 1,000 persons, and has cost £23,000.

The Cargill Monument, which was erected to the memory of the late Captain Cargill, the founder of the Otago settlement, stands in the Triangle, between the Customhouse and the Bank of New Zealand. It is an ornate specimen of early decorated Gothic.

Towns and Surrounding Country.

Port Chalmers (eight miles from Dunedin) situate on Otago Harbour, midway between the Heads and Dunedin, has a population of 2,056 inhabitants. It is the chief port of Otago, and possesses every accommodation for Home vessels, including dry dock, 80-ton sheer-legs, steam-hammer, and other appliances, besides several private foundries, cool-storage chamber, &c. The Port Chalmers graving dock is described in the article on page 59.

Leaving Dunedin by the northern railway, winding in and out through the hills which surround the town, and skirting the precipitous cliffs of the coast-line, the first station of importance reached is Waitati, a favourite seaside resort in Blueskin Bay; distance, seventeen miles. Fifteen miles beyond is Waikouaiti; population, 690; pleasantly situated on the Hawksbury lagoon, the centre of a flourishing farming

country. The next place of note is Palmerston, forty-one miles from Dunedin, with 738 inhabitants. A branch-line leaves Palmerston and runs nine miles up Shag Valley to Dunback. Six miles further on the main line there is a branch to Shag Point, a coalfield, with two pits being actively worked.

Oamaru (seventy-eight miles) is the second town in Otago, having a population of 4,836. It is the centre of a large farming district, and has a good harbour, formed by a concrete breakwater, for the reception of ocean-going ships. The chief exports are wool and grain. A branch-line runs from the junction near Oamaru up the Waiareka Valley to Ngapara, seventeen miles, and Tokaraki, twenty-six miles from Oamaru, and another seven miles by road brings us to Livingstone.

Starting from Oamaru, and proceeding to Central Otago, *viâ* the valley of the Waitaki River, the first part of the journey is accomplished by rail across the fertile Papakaio Plains to Awamoko (ninety-six miles), and thence following up the Waitaki River past Duntroon to Kurow (120 miles). At Kurow the traveller leaves the railway and follows the course of the Waitaki through pastoral country to Rugged Ridges Station (133 miles); a little beyond Rugged Ridges the road leaves the Waitaki River, and crossing the Ahuriri Pass (141 miles), strikes the Ahuriri River, which it follows up past Omarama Station (158 miles) to the junction of Longslip Creek; it then ascends this creek until Lindis Pass saddle is reached (172 miles), at a height of 3,185 feet. Here begins the descent to the Clutha Valley *viâ* Morven Hills Station (181 miles) and Tarras Station (200 miles). From Tarras Station the road runs through settled farming country up the Clutha River, which is crossed by means of a punt at Newcastle (219 miles), and four miles more brings the traveller to Pembroke, on the southern shore of Lake Wanaka.

From Dunedin the main trunk railway runs southward to Invercargill, a distance of 130 miles. Passing through the Caversham Borough and tunnel the traveller reaches Burnside (five miles) and Abbotsford (six miles), industrial centres, with coal-mining, tanning, iron-smelting, and other works. Farther on is Wingatui, the junction of the Otago Central Railway; and ten miles from Dunedin is Mosgiel, a rising township with 1,463 inhabitants, noted for its woollen-mills. The railway-line now skirts the Taieri Plain, an alluvial flat eighteen miles long by five miles broad; the most fertile portion of Otago. A branch-line from Mosgiel junction runs to Outram (nineteen miles), on the farther side of the Taieri Plain. Passing the smaller Townships of Allanton (Greytown) and Henley, and Lakes Waihola and Waipori, the line strikes Milton (thirty-six miles). Milton, in the middle of the Tokomairiro Plain, is a town of 1,241 inhabitants, with flour-mill, dairy factories, flax-mill, pottery works, and tannery. The next place of importance is Balclutha (fifty-three miles), on the banks of the Clutha River, with flax-mills, dairy factories, and chicory works; population 1,017. Kaitangata, situated lower down the Clutha River, and connected by a branch-line, has extensive coalfields, and a population of 1,463. Leaving Balclutha, the main line runs through the Clutha downs, passing the small centres of Waitepeka, Warepa, Kaihiku, and Waiwera, and reaches Clinton (seventy-three miles), on the Waiwera stream, a favourite resort of anglers. The next station of note beyond Clinton is Waipahi Junction (eighty-three miles), on the Waipahi River, likewise a favourite fishing-ground. Further on is Gore (ninety-nine miles), on the Mataura River, in the Southland District. Gore is a fast-rising township of 2,354 inhabitants, with paper-mill, flour-mill, freezing-works, dairy factory, coal-mines, &c.

A branch-line from Waipahi follows up and crosses the Pomahaka River and connects Tapanui (ninety-six miles), Kelso (ninety-eight miles), and Heriot (one hundred and two miles).

The Otago Central Railway starts from Wingatui, crosses the Taieri Plain, and then winds round to the Taieri River, which it follows up to the present terminus at Wedderburn. In its course along the river it runs for some distance through a rocky gorge, but after crossing the Sutton Stream enters Strath-Taieri—a comparatively flat, open country. Near Hindon Station (twenty-five miles), in the Taieri Gorge, and Barewood (thirty-six miles), there are quartz-reefs being worked. In traversing the Strath-Taieri the line passes the Blair-Taieri Village Settlement (forty-four miles), Middlemarch, a rising township (forty-eight miles), and reaches Hyde (sixty-four

miles). The present limit is Wedderburn, although the formation is well advanced as far as Hamilton's. When this section is complete the Maniototo Plain will be tapped, and the extension of the line to Clyde presents no engineering difficulties. Central Otago has a great future before it, as in the opinion of experts it is naturally adapted for producing fruit of all kinds in perfection.

Another means of access to Central Otago is by the Clutha Valley.

Two miles beyond Milton the Lawrence branch leaves Clarkesville Junction, runs up the Tokomairiro River and the gorge of Manuka Creek, and down to Waitahuna (fifty-three miles), and Lawrence (sixty miles), gold-mining centres, with an aggregate population of about 1,500. Gold was first discovered here in 1861, and the mines are still yielding freely. From Lawrence a coach runs to Beaumont (seventy-two miles), on the Clutha River. Crossing the Beaumont Bridge the road follows the west bank of the Clutha, passing numerous dredging-claims. At eighty-nine miles is Ettrick, and seven miles further on is Roxburgh—the Teviot—(ninety-six miles), a town of 478 inhabitants. Recrossing the Clutha River by the Roxburgh Bridge, and proceeding up the east bank, the traveller reaches Alexandra South (124 miles), at the junction of the Manuherikia River with the Clutha, and Clyde—the Dunstan—(130 miles), the chief town of Vincent County. The next place of importance is Cromwell (143 miles), at the junction of the Kawarau River with the Clutha. Cromwell is a small town of 642 inhabitants, and has a good bridge over the Clutha River. If the traveller wishes to pursue his journey farther he can either follow the road up the Clutha to Newcastle and Pembroke, on Lake Wanaka, or take the Kawarau Gorge road by way of the Crown Terrace to Queenstown, on Lake Wakatipu.

Queenstown, a picturesque township situated on the shores of Lake Wakatipu, has a population of 690, and is the centre of a large gold-mining district. The chief feature of Queenstown is the grand mountain and lake scenery in the neighbourhood, which attracts large numbers of tourists every year. There are two ways of reaching Queenstown—the one by the Clutha Valley and Kawarau Gorge, as above described, and the other by rail to Kingston, at the foot of Lake Wakatipu, and thence by steamer, which runs to suit the trains.

The Tautuku bush, in the south of Otago, has only lately been opened up, but already a large number of settlers are making their homes there. Starting from Balclutha the Catlin's River branch-line runs southwards to Romahapa (sixty miles) on the crossing of the main road to Port Molyneux, thence to Glenomaru (sixty-four miles), and Owaka (seventy miles from Dunedin). The Catlin's–Waikawa main road is formed the whole way through, as are also numerous district roads, and the adjacent lands are being taken up as fast as they are thrown open.

Railways.

The principal lines are as follows: (1.) The main trunk line from Dunedin to Christchurch, with branches from Oamaru to Hakataramea, forty-three miles; and Oamaru to Ngapara and Tokoraki, twenty-five miles; also, Palmerston to Dunback, nine miles. (2.) The main trunk line, Dunedin to Invercargill, with branches, Mosgiel to Outram, nine miles; Milton to Lawrence, twenty-four miles; Stirling to Kaitangata, five miles; Balclutha to Owaka, eighteen miles; and Waipahi to Heriot, twenty miles. (3.) The Otago Central, from Wingatui to Wedderburn, eighty-five miles fifty-three chains. Formation from Wedderburn to Manuherikia River is well advanced.

Statistical.

The total population of the Otago Provincial District on the 31st March, 1901, was 173,145.

Area of Otago Land District: Open land below 2,000 ft., 5,300 square miles; forest-land below 2,000 ft., 1,960 square miles; open land above 2,000 ft., 6,777 square miles; forest-land above 2,000 ft., 500 square miles; area of lakes, &c., 280 square miles: total, 14,817 square miles, or 9,482,800 acres.

The following table shows the disposition of the land in the Otago District on 31st March, 1901 :—

	Holdings.	Acres.
1. Lands finally alienated, comprising freehold land and vested reserves	...	2,807,584
2. Lands held on deferred payment, rural	61	16,557
3. Lands held on perpetual lease, rural	286	55,510
4. Lands held under occupation-with-right-of-purchase clause	157	27,694
5. Lands held on lease in perpetuity, ordinary Crown lands, rural	615	159,574
6. Lands held under agricultural lease on goldfields ...	16	530
7. Lands held under Mining Districts Land Occupation Act	116	4,502
8. Lands held under village settlement, deferred payment ...	3	130
9. Lands held under village settlement, perpetual lease ...	34	727
10. Lands held under village settlement, lease in perpetuity ...	124	1,892
11. Lands held under village-homestead special settlement, perpetual lease	81	1,279
12. Lands held by special-settlement associations, lease in perpetuity	14	2,765
13. Lands held as improved-farm settlements	56	7,439
14. Lands held as small grazing-runs	255	520,193
15. Lands held under pastoral license, not including bush ...	242	4,413,792
16. Lands held under lease and license for miscellaneous purposes, exclusive of gold-mining	520	76,935
17. Lands acquired and disposed of as lease in perpetuity under Land for Settlements Act, rural	341	48,457
18. Lands acquired and disposed of as small grazing-runs under Land for Settlements Act	3	3,667
19. Lands acquired and disposed of as miscellaneous licenses under Land for Settlements Act	45	697
20. Crown lands open for selection (including Land for Settlements Act)	...	119,953
21. Crown lands being prepared for selection (including 5,172 acres under Land for Settlements Act)	...	12,059
22. Land open for application under pastoral licenses ...	8	37,710
23. Lands held by aboriginal natives	...	16,500
24. Lakes, and Clutha and Taieri Rivers	...	179,200
25. Balance of Crown lands, including mining reserves, public reserves not vested, bush-lands, roads, barren country, &c.	...	1,027,756
Total area of district (14,817 square miles),		9,482,800

Tenants of lands included in 2 and 4 have the right of acquiring the freehold, as have tenants of 3 up to twelve years from the date of issue of the lease, and of 6 in the case of leases issued prior to the Act of 1891. There is no right of acquiring the freehold for tenants of lands included in 5, 11, 12, 14, 15, 16, 17, 18, and 19, and in the case of No. 13 the right of acquiring freehold applies to portions only. From item No. 1 should be deducted 60,302 acres, having been acquired under Land for Settlements Act, and absorbed in items Nos. 17, 18, 19, and part 20 and 21. The summation of items exceeds total area of district by this amount.

THE SOUTHLAND LAND DISTRICT.

J. HAY, Chief Surveyor.

Physical Features.

The Southland District, comprising the Counties of Southland, Wallace, Fiord, and Stewart Island, bounded on the north and east by the Otago District, and on the south and west by the Tasman Sea, may be said to lie between south latitudes 45° and 47° and east longitudes 166° 15′ and 169° 15′. For administrative purposes, however, the Snares, Auckland, Enderby, Campbell, Antipodes, Bounty, and all other islands within the limits of the colony south of the 47° parallel of south latitude are included in it.

Area and Nature of Lands.

The total area of the district, including Stewart Island, but exclusive of Solander, Ruapuke, and the other small islands enumerated above, is 6,966,592 acres, of which 500,000 are covered with bush. The bulk of the bush-land lies between the lakes and the south and west coasts, in the neighbourhood of Forest Hill, Hokonui, Waikawa, &c. The timbers of commercial value are totara, rimu, miro, matai, rata, and kamahi, in mixed bushes; but *Fagus fusca* and other beeches predominate on the high lands between the lakes and the fiords on the west coast.

The open land in its natural state carries tussock and snow-grass, fern, flax, and manuka, &c., and there is a very considerable area of marsh-land, interspersed here and there with peat bogs.

The most striking feature of this district is the number of well-defined rivers and valleys, the latter often widening out to such an extent as to form very extensive plains. Commencing with the eastern side, the Mataura, Oreti (or New River), Aparima (or Jacob's River), and Waiau are the most prominent illustrations of this; but these rivers by no means exhaust the list, as they all have numerous tributaries, which exhibit the same features on a smaller scale.

Speaking generally, the watersheds of these rivers do not attain any great height until followed far inland, and near the great lakes to be presently noticed. From what has been said above it follows that the extensive plains and valleys referred to are of alluvial formation, in many places of very rich and fertile quality, and capable of raising crops of every known product, subject, of course, to climatic limitations. Generally these plains and valleys rise from the river-levels in a very gradual slope, sometimes into a series of terraces from 10ft. to 50ft. in height, and sometimes into undulating hills, intersected at frequent intervals by lateral gullies, affording natural drainage and an abundant supply of water.

These hills are covered with an indigenous growth, consisting of tussock and other grasses, fern, flax, &c., and even in their native state afford excellent grazing for sheep.

Near the large lakes, such as Wakatipu, Te Anau, Manapouri, Hauroto, and others, and between these and the West Coast, the country becomes very high, often reaching 5,000ft. and 6,000ft. above sea-level, with very steep and rugged spurs and ravines, these in most cases being covered with a dense growth of timber, principally of the birch or beech tribe, for two-thirds of their height: the tops, however, often carry tussock and other herbage, affording admirable pasture for sheep in summer; but stock have to be removed from April to October, during which period this country is generally covered with snow.

Southland does not contain so much forest as most of the North Island districts, nevertheless there is a very considerable quantity in the eastern, southern, and western parts, and a large export trade is done in the different kinds of pine and other timbers used for building, engineering, furniture-making, &c.

From what has been said of the river systems it will be evident that the country is well supplied with water, although none of the rivers can be used for purposes of internal communication; but the plains are traversed by railways for

considerable distances from the principal towns, and where the railways end communication is continued by good roads, so that there is probably no part of the colony so well off for means of transit.

Agriculture.

Having already touched on the character of the soil, it only remains to say that the plains, terraces, and lower hills are well adapted for raising wheat, oats, and other cereals, turnips, mangolds, beets, and the various other crops common to temperate climates. Wheat is not so widely grown as it might be, for the reason, probably, that the pastoral branches of farming receive more attention than the agricultural, and wheat is not required for these; whereas oats are largely grown for export and to feed sheep in the form of chaff; turnips also are much cultivated for winter food. Where wheat is grown the yields are very satisfactory, ranging from 40 to 60 bushels per acre, while oats frequently give 80 to 100 bushels.

Linseed is now receiving some attention from farmers, as they find ready sale for it to the manufacturing chemists at remunerative prices, a fair crop yielding over £5 per acre.

Dairy-farming, &c.

Dairy-farming now forms a very important industry in this district, a number of factories having been established within the last two or three years, the total number in the district being twenty-three; one being a large condensed-milk factory, one making first-class Stilton cheese, and the rest being cheese and butter factories.

Sheep-farming.

By far the most important industries are those connected with the raising and export of mutton and wool. Some years ago sheep-farming was much hindered by the inroads of rabbits; but owing to the repressive measures adopted there has been a marked abatement of the pest, even on high back-country, and thus it has come to pass that country which a few years ago was absolutely denuded of vegetation now shows unmistakable signs of recovery. The hill-country, although it does not carry a large proportion of stock to area, is eminently healthy. The average carrying-capacity over the whole district would probably be under one sheep to the acre. Until within the last few years most of the runs were stocked with merinos, but owing to the decline in price of merino wool, and to the carcase being unacceptable to the European market, these sheep have, generally speaking, been replaced by Leicesters, Lincolns, Romney Marsh, Cheviot, and crossbreds of various kinds, better suited to the existing demands. Large establishments for slaughtering and freezing sheep are at work. The latest of these, erected near the Bluff Harbour, is considered to be the most complete in the colony, being provided with all possible labour-saving machinery and appliances for working up the by-products into articles of commerce.

Coal and Gold.

Extensive seams of coal and lignite are distributed over the district, and in many places the annual output is considerable. Peat is also found in some up-country neighbourhoods, and is used for fuel where wood and coal are scarce. Gold is found all over the district, and a large number of persons are engaged in obtaining it either by sluicing or dredging. A considerable amount of capital has been invested in river- and beach-dredges worked by steam. Not long ago payable gold-bearing reefs were discovered at Wilson's River, near Preservation Inlet, and lately at Stewart Island.

Fish.

Salt-water fish abound in great quantities in the waters surrounding Stewart Island, and oysters are found on banks between that island and the Bluff. All the large rivers, and many of the tributaries, are well stocked with trout, and one river —the Aparima—had salmon-spawn put into it some years ago, and, it is now believed, with some success.

Fruit.

The small English fruits, such as gooseberries, currants, raspberries, strawberries, &c., grow in great profusion, as do also apples. Stone-fruits are not so common, although peaches, nectarines, apricots, &c., do well when trained against nursery-walls in favourable aspects.

Climate.

The climate is bracing in winter, and warm and genial in spring and summer. The old residents state that there has been a marked decrease in the rainfall within the last decade. No regular observations have been recorded for the last few years, but it is believed that the average is about 30 in. a year. It may, however, be observed that more rain falls near the coast than inland, and also that the rainfall is more evenly distributed throughout the year than is the case in the northern part of the colony. The temperature varies from 40° in winter to 70° in summer.

Towns.

Invercargill, the chief town, was from the first well laid out with wide streets, and liberal reserves in the town belts for recreation purposes. The Corporation exercises a paternal care in providing water, gas, and in disposing of sewage, &c., for the citizens; and the streets are well lighted, paved, and maintained. Artesian water is pumped to the top of a handsome brick tower—which, by the way, is a very conspicuous landmark—and stored there in a tank, from which most of the houses within the town boundaries are supplied. The population, including suburbs, is nearly 11,000. Four railways concentrate here, one from the famed Cold Lakes, another from Dunedin and Christchurch, while a third line communicates with the agricultural and pastoral country known as the Western District, the short line to the Port of Bluff, carrying a very heavy traffic, the main produce of the district, for export. There are rope-and-twine, carriage- and implement-factories, flour-mills, sawmills, fellmongeries, brick- and pottery-works, iron-foundries, and various other industries. Exceptionally good beer is brewed here, and there are three first-class hotels. The Government Buildings, lately enlarged, are on a scale not often seen in a town of the same size. A clock and chimes of New Zealand make have been placed in the central tower. Although the Bluff is the principal port, Invercargill is provided with a second harbour for smaller vessels, in the New River Estuary, where there is a jetty with appliances for handling and receiving goods within the town boundaries.

The Bluff Harbour, which is connected by rail with Invercargill, does a very large shipping business, and derives additional importance from being the first and last port of call for steamers trading with Victoria and Tasmania.

Next in size to Invercargill is the inland Town of Gore, situated on the Mataura River, and at the junction of the trunk railway with the Waimea Plains Branch. Owing to this fact, and to the fertility of the land in the neighbourhood, Gore is rapidly growing in size and importance.

Riverton is a pretty little town, about twenty-five miles from Invercargill, with which it is connected by rail, and is situated on the estuary of Aparima or Jacob's River. This is the oldest settlement in Southland, and was a great resort for whalers in former years. The harbour is available for coasting-vessels, but the principal carrying-trade is done by rail. There are several sawmills in the neighbourhood, this industry being largely carried on near the many timbered localities in the district.

The Village of Nightcaps is reached by a short line of railway near Riverton. A large colliery exists here, supplying the whole district with a good coal for general use.

The Town of Winton is on the Invercargill–Kingston Railway, about twenty miles distant from the latter, and is the centre for a good farming, sawmilling, and coal-mining district.

Lumsden is the junction of the Kingston and Waimea Plains lines. Coaches starting from this place take passengers and mails to the Lake country.

East of Invercargill is Fortrose, on the estuary of Mataura River, which can be entered by coasting-steamers. This place is surrounded by exceedingly fertile agricultural and pastoral country.

Eastward of Fortrose and about midway between that place and Catlin's River is Waikawa, a newly-settled township with a first-class harbour for coasters, and a large area of Crown land around it available for settlement. Steamers trading with Dunedin and Invercargill call here and at Fortrose at regular intervals.

Crown Lands for Disposal.

There remains for disposal a very large area of Crown land, probably more than 500,000 acres, but this can be estimated only roughly, because much of the district west of Waiau River is practically unexplored. It is true that this is chiefly forest-land, but it is beginning to be recognised here, as in the North Island, that when such land is once cleared and laid down with grass it is distinctly superior to most open country for grazing purposes; and grazing is and will long remain the principal industry of the colony. The land referred to lies around Waikawa Harbour, along the Waikawa-Catlin's Road, between the Jacob's and Waiau Rivers, and to the west of the Waiau. Stewart Island also contains a wide extent of Crown lands, mostly forest-clad. There are also considerable areas of open hilly country, carrying natural grasses, still in the hands of Government. These are to be found in various parts of the district, but are being rapidly taken up.

APPENDIX

PRINCIPAL EVENTS.

DATES OF SOME OF THE PRINCIPAL EVENTS IN THE HISTORY OF NEW ZEALAND.

Dec. 13, 1642.—Discovery of New Zealand by Abel Jansen Tasman.

Oct. 8, 1769.—Captain Cook landed at Poverty Bay on his first visit.

June 30, 1788.—Macauly and Curtis Islands, of the Kermadec Group, discovered by Captain Sever, of H.M. transport "Lady Penrhyn."

Nov. 29, 1790.—Chatham Islands discovered by Lieutenant Broughton, in H.M.S. "Chatham."

Nov. 17, 1793.—Captain d'Entrecasteaux, with the "La Recherche" and "L'Espérance," discovered Raoul or Sunday Island. (The latter name was given by Captain Raven, of the transport "Britannia," who visited the island 6th Nov., 1796.)

Nov., 1793.—Lieutenant-Governor King's (of Norfolk Island) visit to Doubtless Bay.

1795.—The ship "Endeavour," Captain Bampton, sunk at Facile Harbour, Dusky Sound.

1800.—Antipodes Island discovered by Captain Pendleton.

1806.—Auckland Isles discovered by Captain Briscow, ship "Ocean," one of Enderby's whalers.

1806.—Ship "Venus" visited East Coast of New Zealand. She was taken by convicts at Port Dalrymple, Tasmania. Their visits gave rise to the Nga-Puhi southern expedition.

1807.—Defeat of Hongi and Nga-Puhi tribe at Moremonui, 10 miles south of Maunganui Bluff, Kaipara.

1809.—The taking and burning of the transport "Boyd" at Whangaroa.

1810.—Campbell Island discovered by Captain F. Haselburg, of brig "Perseverance."

1814.—First arrival of the Rev. Mr. Marsden at Bay of Islands, and introduction of Christianity. Horses, oxen, sheep, and poultry first brought to the colony.

Aug., 1815.—Attempted capture of the "Trial" and "Brothers" at Kennedy Bay.

1818.—Hongi's and Te Morenga's great expedition to East Cape.

1819-20.—Patuone, Nene, and Te Rauparaha's raid on Taranaki and Port Nicholson.

1820.—Hongi visited England; returned to New Zealand July, 1821.

1820.—H.M. store-ship "Coromandel" visited Coromandel.

1820.—Rev. S. Marsden travelled from Wai-te-mata *viâ* Kaipara to the Bay of Islands—the first white man to do so.

Aug., 1820.—The "Prince Regent" entered Auckland Harbour—the first vessel to do so.

Nov., 1821.—Fall of Mauinaina Pa, Auckland Isthmus, to Hongi.

Nov., 1821.—Ngati-Toa migration from Kawhia to Otaki under Te Rauparaha.

Dec., 1821.—Fall of Te Totara Pa, Thames, to Hongi.

May, 1822.—Fall of Matakitaki Pa, Waikato, to Hongi.

May, 1823.—Fall of Mokoia Pa, Rotorua Lake, to Hongi.

1823, 1828.—Acts passed by the Imperial Parliament extending the jurisdiction of the Courts of justice in New South Wales to all the British subjects in New Zealand.

1824.—Fall of Te Whetumatarau Pa, near East Cape, to Pomare.

1825.—First attempt at colonisation by an expedition under the command of Captain Herd, who bought two islands in the Hauraki Gulf.

Feb., 1825.—Great defeat of Ngati-Whatua at Te Ikaaranganui, Kaipara, by Hongi.

1827.—Destruction of mission-station at Whangaroa by Hongi's forces.

Feb., 1827.—Admiral (then Captain) Dumont D'Urville anchored in Auckland Harbour.

1828.—Hongi died at Whangaroa, from wounds received at Hokianga.

1828.—The "Maquarie," Captain Kent, the first vessel to enter Kawhia.

March, 1829.—Brig "Hawes" captured at Whakatane by Maoris.

1830.—Battle of Taumata-wiwi, near Cambridge.

1830.—Fall of Kaiapohia Pa, Canterbury.

March 6, 1830.—Battle of Kororareka, between two Nga-Puhi tribes.

Dec., 1830.—Death of Tama-i-hara-nui at the hands of Te Rauparaha's people. He was brought from Port Cooper by Captain Steward, brig "Elizabeth."

1831.—Tory Channel whaling-station established.

1831.—Application of thirteen chiefs for the protection of King William the Fourth.

Dec., 1831.—Pukerangiora Pa, Waitara, fell to Waikato.

Feb., 1832.—Repulse of Waikato at Nga-motu Pa, under Dicky Barrett.

1833.—Mr. Busby appointed British Resident, to live at the Bay of Islands.

1834.—Battle of Haowhenua and Pakakutu, near Otaki.

1834.—Bishop Williams's first visit to East Cape.

April 29, 1834.—"Harriet" wrecked at Cape Egmont.

Oct. 1, 1834.—H.M.S. "Alligator" shelled and took Waimate Pa, near Opunake. First occasion of H.M. troops being employed in New Zealand.

1835.—Declaration of independence of the whole of New Zealand as one nation, with the title of "The United Tribes of New Zealand."

Nov. and Dec., 1835.—Ngati-Awa tribes migrated to and conquered the Chatham Islands.

March 28, 1836.—Maketu Pa, Bay of Plenty, fell to Waikato.

May 9, 1836.—Te Tumu Pa, Bay of Plenty, fell to Te Arawa.

Aug. 5, 1836.—Battle at Matai-puku, Rotorua—Waikato beat Te Arawa.

Oct.. 1836.—Siege of Toka-a-kuku, Te Kaha, Bay of Plenty.

1838.—The Roman Catholic Bishop Pompallier, with several priests, arrived at Hokianga.

Sept. 1, 1838.—H.M.S. "Pelorus" discovers Pelorus Sound.

April, 1839.—Taking of the French whaler "Jean Bart" at Chatham Islands by Maoris.

May 12, 1839.—Departure of the preliminary expedition of the New Zealand Company from England.

June, 1839.—Issue of Letters Patent authorising the Governor of New South Wales to include within the limits of that colony any territory that might be acquired in sovereignty by Her Majesty in New Zealand.

Sept. 16, 1839.—First body of New Zealand Company's emigrants sailed from Gravesend.

Sept. 20, 1839.—Arrival in Port Nicholson of the preliminary expedition of the New Zealand Company under Colonel Wakefield.

Oct. 16, 1839.—Battle of Te Kuititanga, Otaki.

Jan. 20, 1840.—First steamer arrived in New Zealand.

Jan. 22, 1840.—Arrival of first body of immigrants at Port Nicholson.

Jan. 29, 1840.—Captain Hobson, R.N., arrived at the Bay of Islands. On the following day (Jan. 30) he hoisted the Union flag, and read the commission, under the Great Seal of the United Kingdom, which extended the boundaries of the Colony of New South Wales so as to embrace and comprehend the Islands of

New Zealand; also his own commission as Lieutenant-Governor over territory that might be acquired in sovereignty.

Feb. 5, 1840.—Treaty of Waitangi signed.

May 21, 1840.—Date of Proclamations of sovereignty over the Islands of New Zealand.

June 17, 1840.—The Queen's sovereignty over the Middle Island formally proclaimed at Cloudy Bay, by Major Bunbury, H.M. 80th Regiment, and Captain Nias, R.N.

Aug. 11, 1840.—The British flag hoisted at Akaroa by Captain Stanley, R.N., and British authority established. The French frigate "L'Aube" arrived there on the 13th August, and the vessel "Comte de Paris," with fifty-seven immigrants, on the 16th August, in order to establish a French colony.

Sept. 18, 1840.—The British flag hoisted at Auckland. The Lieutenant-Governor's residence established there.

1840.—Formation of Wanganui settlement under the name of "Petre."

Feb. 12, 1841.—Issue of charter of incorporation to the New Zealand Company.

Mar. 31, 1841.—Arrival of first New Plymouth settlers.

May 3, 1841.—New Zealand proclaimed to be independent of New South Wales.

Oct., 1841.—Selection of site for settlement at Nelson.

Feb. 1, 1842.—Settlement founded at Nelson.

May 29, 1842.—Arrival of Bishop Selwyn in the colony.

Sept. 10, 1842.—Death of Governor Hobson. Lieutenant Shortland, R.N., Colonial Secretary, became Acting-Governor until the arrival of Captain Fitzroy.

June, 1843.—Affray with Natives at the Wairau, and massacre by Rangihaeata of Captain Wakefield, R.N., agent at Nelson of the New Zealand Company, and others, who had surrendered.

Dec. 1, 1843.—Arrival of Captain Fitzroy, R.N., as Governor.

July 8, 1844.—The Royal flagstaff at Kororareka cut down by Heke.

March 10, 1845.—Attack on and destruction of Town of Kororareka by Heke.

Oct. 1, 1845.—Receipt of despatch notifying recall of Governor Fitzroy.

Nov. 14, 1845.—Arrival of Captain Grey, as Lieutenant-Governor of the colony, from South Australia.

Jan. 11, 1846.—Capture of pa at Ruapekapeka, Bay of Islands, and termination of Heke's war.

Mar. 3, 1846.—Commencement of Native hostilities in the Hutt Valley, near Wellington.

May 16, 1846.—Attack by Natives on a military outpost in the Hutt Valley.

July 23, 1846.—Capture of Te Rauparaha at Porirua, near Wellington. He was detained for a year as a prisoner on board a ship of war.

Aug. 28, 1846.—The New Zealand Government Act passed by the Imperial Parliament, under which a charter was issued dividing the colony into two provinces, and granting representative institutions.

May 19, 1847.—Attack by Natives on settlement of Wanganui.

Jan. 1, 1848.—Captain Grey sworn in as Governor-in-Chief over the Islands of New Zealand, also as Governor of the Province of New Ulster and Governor of the Province of New Munster.

Jan. 3, 1848.—Major-General Pitt appointed by Governor Grey to be Lieutenant-Governor of the Province of New Ulster.

Jan. 28, 1848.—Assumption by Lieutenant-Governor E. J. Eyre, at Wellington, of the administration of the Government of the Province of New Munster.

Feb. 21, 1848.—Peace ratified at Wanganui.

Mar. 7, 1848.—Suspension by Imperial statute of that part of the New Zealand Government Act which had conferred representative institutions.

Mar., 1848.—Otago founded by a Scotch company under the auspices of the Free Church of Scotland.

Oct., 1848.—Severe earthquake at Wellington.

July 1850.—Surrender of the New Zealand Company's charter, all its interests in the colony reverting to the Imperial Government.

Dec., 1850.—Canterbury founded by the Canterbury Association in connection with the Church of England.

Jan. 8, 1851.—Death of Major-General Pitt, Lieutenant-Governor of the Province of New Ulster.

April 14, 1851.—Lieutenant-Colonel Wynyard appointed Lieutenant-Governor of the Province of New Ulster.

1852.—Discovery of gold at Coromandel by Mr. Charles Ring.

June 30, 1852.—The Constitution Act passed by the Imperial Parliament, granting representative institutions to the colony, and subdividing it into six provinces.

Jan., 1853.—Promulgation of the Constitution Act.

Mar. 7, 1853.—Assumption by Sir George Grey, K.C.B., of the duties of Governor of the colony, in terms of the appointment after the passing of the New Zealand Constitution Act, and cessation of the duties of the Lieutenant-Governors of New Ulster and New Munster.

Dec. 31, 1853.—Departure of Governor Sir George Grey.

Jan. 3, 1854.—Lieutenant-Colonel Wynyard assumed the administration of the Government.

May 27, 1854.—Opening at Auckland of the first session of the General Assembly by Lieutenant-Colonel Wynyard, Administrator of the Government.

Jan., 1855.—Very severe earthquake on each side of Cook Strait.

Sept. 6, 1855.—Arrival of Governor Colonel T. Gore Browne, C.B.

Nov. 12, 1855.—First members elected to House of Representatives under system of Responsible Government.

Aug. 8, 1855.—General Assembly opened.

Sept. 15, 1855.—General Assembly prorogued.

May 7, 1856.—Appointment of the first Ministry under the system of Responsible Government, under Mr. Sewell, Colonial Secretary.

May 14, 1856.—Defeat of Mr. Sewell's Ministry.

May 20, 1856.—Appointment of a Ministry under presidency of Mr. W. Fox, as Attorney-General.

May 28, 1856.—Defeat of Mr. Fox's Ministry, by a majority of one, on a direct vote of want of confidence.

June 2, 1856.—Appointment of a Ministry under the presidency of Mr. E. W. Stafford.

1857.—First payable goldfield in the colony opened at Collingwood, in the Nelson Province.

Aug. 21, 1858.—New Provinces Act passed.

Nov. 1, 1858.—Establishment of the Province of Hawke's Bay.

Dec. 22, 1858.—The Austrian exploring frigate "Novara" arrived in Auckland Harbour. Dr. Ferdinand von Hochstetter, at the request of the New Zealand Government, was commissioned to make geological surveys of the greater part of Auckland and Nelson Provinces.

March, 1859.—Te Teira offered land at Waitara for sale to the Government.

Nov. 1, 1859.—Establishment of the Province of Marlborough.

Mar., 1860.—Commencement of hostilities against Wiremu Kingi te Rangitake at Waitara.

Mar. 18, 1860.—Capture of Maori pa at Waitara.

Mar. 28, 1860.—Engagement at Waireka.

June 27, 1860.—Engagement of Puketakauere at Waitara.

Nov. 6, 1860.—Defeat at Mahoetahi, with heavy loss, of a force of Waikato Natives, who had crossed the Waitara River to join Wiremu Kingi.

Dec. 31, 1860.—Capture of the Matarikoriko Pa, and defeat of a large body of Waikato Natives.

Jan. 23, 1861.—The Natives made a determined attack on the redoubt at Huirangi occupied by Imperial troops, and were repulsed with heavy loss.

April 1, 1861.—Establishment of Province of Southland.

May 21, 1861.—A truce agreed to.

May, 1861.—Discovery of gold at Gabriel's Gully, Otago.

July 5, 1861.—Defeat of Mr. Stafford's Ministry, by a majority of one, on a vote of want of confidence.

July 12, 1861.—Appointment of a Ministry under the premiership of Mr. Fox.

July 29, 1861.—Incorporation of the Bank of New Zealand.

Sept. 26, 1861.—Arrival of Sir George Grey, K.C.B., at Auckland, from the Cape Colony, to succeed Governor Gore Browne. Sir George Grey was sworn in as Governor on the 3rd October.

Oct. 2, 1861.—Departure of Governor Gore Browne.

June 28, 1862.—Coromandel proclaimed a goldfield.

June 29, 1862.—Wreck of s.s. "White Swan" on East Coast (with loss of many public records, in transit from Auckland).

July 28, 1862.—Defeat of Mr. Fox's Ministry by the casting-vote of the Speaker, on a proposed resolution in favour of placing the ordinary conduct of Native affairs under the administration of the Responsible Ministers.

Aug. 6, 1862.—Appointment of a Ministry under the leadership of Mr. Alfred Domett.

Feb. 7, 1863.—Wreck of H.M.S. "Orpheus" on Manukau Bar; 181 lives lost.

Feb. 26, 1863.—Definite relinquishment by the Imperial Government of control over administration of Native affairs.

May 4, 1863.—Treacherous assault near Tataraimaka by Natives on a military escort. Murder of Lieutenant Tragett, Dr. Hope, and five soldiers of the 57th Regiment.

June 4, 1863.—Defeat of Natives at Katikara, by a force under Lieut.-General Cameron.

July 17, 1863.—Action at Koheroa, in the Auckland Province. Commencement of the Waikato War.

Oct. 27, 1863.—Resignation of the Domett Ministry, in consequence of difficulties experienced in connection with arrangements for finding a fitting representative of the Government in the Legislative Council.

Oct. 30, 1863.—Appointment of the Ministry formed by Mr. Fox, under the premiership of Mr. F. Whitaker.

Nov., 1863.—Acceptance by the General Assembly of colonial responsibility in Native affairs.

Nov. 20, 1863.—Battle of Rangiriri. Defeat of Natives and unconditional surrender of 183.

Dec. 1, 1863.—The first railway in New Zealand opened for traffic by W. S. Moorhouse, Superintendent of Canterbury. The line was from Christchurch to Ferrymead Junction.

Dec. 3, 1863.—The New Zealand Settlements Act passed, giving the Governor power to confiscate the lands of insurgent Natives.

Dec. 8, 1863.—Occupation of Ngaruawahia. The British flag hoisted on the Maori king's flagstaff.

Feb. 11, 1864.—Engagement with Natives on Mangapiko River. Major (then Captain) Heaphy, of the New Zealand Forces, won the Victoria Cross for distinguished bravery on this occasion.

Feb. 22, 1864.—Defeat of Natives at Rangiaohia.

April 2, 1864.—Attack on and capture of pa at Orakau, Waikato.

April 21, 1864.—Engagement near Maketu, Bay of Plenty. Tribes of the Rawhiti defeated by Arawa Natives, under Captain McDonnell.

April 29, 1864.—Assault on Gate Pa, Tauranga, Bay of Plenty, and repulse of large British force by the Maoris. The pa was abandoned by the Natives during the following night.

April 30, 1864.—Repulse of attack by rebel Hauhau Natives on redoubt at Sentry Hill, Taranaki.

May 14, 1864.—Battle of Moutoa, an island in the Wanganui River, between friendly and rebel Hauhau Natives. Complete defeat of rebels.

June 21, 1864.—Engagement at Te Ranga, near Tauranga, by Lieut.-Colonel Greer, 68th Regiment. Severe defeat of the Natives.

1864.—Discovery of gold on the west coast of the Middle Island.

Sept. 10, 1864.—Escape of Maori prisoners from Kawau.

Oct. 3, 1864.—Wellington chosen as the seat of Government.

Nov. 24, 1864.—Appointment of a Ministry under the premiership of Mr. F. A. Weld, the Whitaker-Fox Ministry having resigned during the recess.

Dec. 17, 1864.—Confiscation of Native lands in Waikato by Sir George Grey.

Feb., 1865.—Removal of the seat of Government to Wellington.

March 2, 1865.—Barbarous murder of the Rev. Mr. Volkner, a Church of England missionary, at Opotiki, by Hauhau fanatics, under Kereopa.

June 8, 1865.—Submission of the Maori Chief Wiremu Tamihana te Waharoa (William Thompson).

June 17, 1865.—Murder of Mr. Fulloon, a Government officer, and his companions, at Whakatane, by Hauhau fanatics.

July 22, 1865.—Capture of the Wereroa Pa, near Wanganui.

Aug. 2, 1865.—Assault and capture of the Pa Kairomiromi, at Waiapu, by Colonial Forces under Captain Fraser, and Native Contingent under the chief Te Mokena. Eighty-seven rebels killed.

Sept. 2, 1865.—Proclamation of peace issued by Governor Sir George Grey, announcing that the war, which commenced at Oakura, was at an end.

Sept. 30, 1865.—Murder by Hauhaus, at Kakaramea, of Mr. Broughton, when sent as friendly messenger to them by Brigadier-General Waddy.

Oct. 12, 1865.—Resignation of Mr. Weld's Ministry, on account of a resolution adverse to the Government policy, having been defeated only by the casting-vote of the Speaker.

Oct. 16, 1865.—Appointment of a Ministry under the premiership of Mr. E. W. Stafford.

Dec. 25, 1865.—Defeat of rebel Natives at Wairoa, Hawke's Bay, by Colonial Forces and Native Contingent.

Jan. 4, 1866.—Defeat of Natives at Okotuku Pa, on the west coast of the North Island, by force under Major-General Chute.

Jan. 7, 1866.—Assault on and capture of Putahi Pa, by force under Major-General Chute.

Jan. 13, 1866.—Assault on and capture of Otapawa Pa, by force under Major-General Chute.

Jan. 17, 1866, to Jan. 25, 1866.—Period of Major-General Chute's march through the bush to New Plymouth.

Jan., 1866.—Escape of a large number of Native prisoners from the hulk at Wellington; many were drowned in trying to swim ashore.

March 29, 1866.—Submission of the rebel chiefs Te Heuheu and Herekiekie, of Taupo district.

Mar., 1866.—A detachment of Maori prisoners sent to the Chatham Islands.

June 15, 1866.—Commencement of Panama steam mail-service.

Aug. 26, 1866.—The Cook Strait submarine telegraph cable laid.

Oct. 2, 1866.—Engagement with rebel Natives at Pungarehu, West Coast, by Colonial Forces, under Major McDonnell.

Oct. 8, 1866.—First Act passed to impose stamp duties.

Oct. 12, 1866.—Defeats of rebel Natives at Omaranui and at Petane, Hawke's Bay, by Colonial Forces.

Oct. 10, 1867.—An Act passed to establish an institute for the promotion of science and art in the colony.

Oct. 10, 1867.—An Act passed for the division of the colony into four Maori electorates, and the admission of four Maori members to the House of Representatives.

Jan., 1868.—Establishment of the County of Westland.

Feb. 5, 1868.—Arrival of Governor Sir George F. Bowen, G.C.M.G.

July 4, 1868.—Seizure by Maori prisoners, under the leadership of Te Kooti, of the schooner "Rifleman," and their escape from the Chatham Islands.

July 12, 1868.—Night attack by Natives on redoubt at Turuturu Mokai. Sub-Inspector Ross and seven Europeans killed. Natives driven off by the arrival of a force under Major Von Tempsky.

Aug. 8, 1868.—Pursuit by Lieut.-Colonel Whitmore of escaped Chatham Island prisoners, and indecisive engagement in the gorge of the Ruake Ture.

Aug. 21, 1868.—Attack on Ngutu-o-te-Manu by force under Lieut.-Colonel McDonnell. Defeat of Natives; four Europeans killed and eight wounded.

Sept. 7, 1868.—Engagement in bush at Ngutu-o-te-Manu. Major Von Tempsky, Captains Buck and Palmer, Lieutenants Hunter and Hastings, and fourteen men killed.

Oct. 19, 1868.—Bishop Selwyn left New Zealand.

Nov. 7, 1868.—Attack on Moturoa. Repulse of Colonial Forces, with severe loss.

Nov. 10, 1868.—Massacre of thirty-two Europeans at Poverty Bay by Te Kooti's band of Natives, who had escaped from the Chatham Islands.

Nov. 24, 1868, Dec. 3, 1868, Dec. 5, 1868.—Engagements between friendly Natives and rebels under Te Kooti, at Patutahi, Poverty Bay district.

Jan. 5, 1869.—Assault on and capture of Ngatapa Pa, Poverty Bay district, after a siege of six days, by the Colonial Forces of Europeans and friendly Natives under Colonel Whitmore and Major Ropata. Dispersion and pursuit of Te Kooti's band. More than 136 rebel Natives were killed.

Feb. 13, 1869.—Treacherous murder of the Rev. John Whitely and seven other Europeans at the White Cliffs, Taranaki.

Feb. 18, 1869.—Attack by rebel Natives on a foraging-party at Karaka Flat; one sergeant and six men killed.

Mar. 3, 1869.—Termination of Panama mail-service.

Mar. 13, 1869.—Attack on and defeat of Titokowaru's force at Otauto.

April 10, 1869.—Native pa at Mohaka taken by Te Kooti, who killed forty friendly Natives and several Europeans in the neighbourhood.

April 12, 1869.—First arrival of H.R.H. the Duke of Edinburgh in Wellington, in H.M.S. "Galatea."

May 6, 1869.—Surprise and capture of Ahikereru and Oamaru Teangi Pas, Waiwera country. Defeat of Te Kooti.

June 13, 1869.—Surrender to Major Noake and Mr. Booth, R.M., of the chief Tairua, with 122 men, women, and children of the PakakoheTribe, near Wanganui.

June 24, 1869.—Defeat of Mr. Stafford's Ministry on a want-of-confidence motion.

June 28, 1869.—Appointment of a Ministry under the premiership of Mr. W. Fox.

Sept. 3, 1869.—An Act passed providing Government life insurance and annuities.

Oct., 1869.—Seventy-four prisoners from the bands of Te Kooti and Titokowaru sentenced to death, after trial, for treason. The sentences of seventy-three were commuted to penal servitude for various terms.

Oct. 4, 1869.—Pourere Pa stormed and taken by Lieut.-Colonel McDonnell, with a mixed force of Europeans and Natives.

Jan., 1870.—Three hundred friendly Natives under Topia, and three hundred under Major Keepa (known as Kemp), started up the Wanganui River in pursuit of Te Kooti, who retreated into the Urewera country.

Jan. 25, 1870.—Capture of Tapapa Pa, occupied by Te Kooti.

Feb. 24, 1870.—The last detachment of the Imperial troops left the colony.

Mar. 25, 1870.—Major Keepa, with Native force, captured the position held by Te Kooti at Maraetahi, in Urewera country; nineteen rebels killed and seventy-three of Te Kooti's men taken prisoners. Te Kooti escaped with twenty followers.

Mar. 26, 1870.—Commencement of San Francisco mail-service.

June 28, 1870.—Enunciation in the House of Representatives of the public-works policy by the Colonial Treasurer, Mr. Vogel.

July, 1870.—Thirty prisoners of Te Kooti's band sentenced to death. The sentences were commuted to penal servitude.

Aug. 27, 1870.—Arrival in Wellington of H.R.H. the Duke of Edinburgh in H.M.S. "Galatea." Second visit.

Sept. 12, 1870.—An Act passed to establish the New Zealand University.

Sep. 12, 1870.—The Land Transfer Act passed, to simplify the title to land and dealings with real estates.

Oct. 6, 1870.—Southland Province reunited with Otago.

Dec. 5, 1870.—Honiani te Puni, the chief of the Ngatiawas, a staunch friend of the Europeans, died at Petone, near Wellington, aged ninety years.

Mar., 1871.—Commencement of railway-construction under the public-works policy.

Aug. 4, 1871.—Death of Tamati Waka Nene, the great Ngapuhi chief and friend of the Europeans.

Nov., 1871.—Capture of the notorious rebel Kereopa, the murderer of the Rev. Mr. Volkner, by the Ngatiporous.

Jan. 5, 1872.—Execution of Kereopa at Napier.

Jan., 1872.—Remission of sentences on fifty-eight Native prisoners then undergoing imprisonment for rebellion.

Feb. 22, 1872.—Visit of William King, the Maori chief of Waitara, to New Plymouth, and resumption of amicable relations with the Europeans.

May 9, 1872.—A general thanksgiving-day for the recovery of H.R.H. the Prince of Wales.

Sept. 6, 1872.—Defeat and resignation of Mr. Fox's Ministry.

Sept. 10, 1872.—Appointment of a Ministry under the premiership of the Hon. E. W. Stafford.

Oct. 4, 1872.—Defeat of the Stafford Ministry on a vote of want of confidence moved by Mr. Vogel.

Oct. 11, 1872.—Appointment of a Ministry under the premiership of the Hon. G. M. Waterhouse, M.L.C.

Oct. 11, 1872.—First appointment of Maori chiefs (two) to be members of the Legislative Council.

Oct. 25, 1872.—The Public Trust Office Act passed.

Jan., 1873.—Establishment of the New Zealand Shipping Company.

Mar. 3, 1873.—The Hon. W. Fox appointed Premier on the resignation of that office by the Hon. G. M. Waterhouse, the other members of the Ministry being confirmed in their offices.

Mar. 19, 1873.—Departure of Governor Sir G. F. Bowen, G.C.M.G.

Mar. 21, 1873.—Assumption of the Government by Sir G. A. Arney, Chief Justice, as Administrator.

April 8, 1873.—Resignation of the premiership by the Hon. W. Fox, on the return of the Hon. J. Vogel, C.M.G., from Australia. Appointment of Mr. Vogel as Premier, the other Ministers being confirmed in their offices.

June 14, 1873.—Arrival of Governor Sir J. Fergusson, P.C.

Aug. 22, 1874.—The Imprisonment for Debt Abolition Act passed.

Nov. 27, 1874.—Sir James Fergusson left New Zealand.

Dec. 3, 1874.—Arrival of Governor the Marquis of Normanby, P.C.

1874.—31,774 immigrants were introduced this year under the immigration and public-works policy.

Jan. 3, 1875.—Visit of Sir Donald McLean to the Maori king; resumption of amicable relations.

July 6, 1875.—Resignation of the Ministry, in consequence of the absence of Sir J. Vogel, K.C.M.G., in England, and his being unable to attend the session of Parliament. Reconstitution thereof, under the premiership of the Hon. Dr. Pollen, M.L.C.

July, 1875.—Establishment of the Union Steam Shipping Company of New Zealand.

1875.—18,324 immigrants were introduced this year under the immigration and public-works policy.

Oct. 12, 1875.—The Abolition of Provinces Act passed.

Feb. 15, 1876.—Resignation of the Hon. Dr. Pollen's Ministry, and reconstitution under the premiership of Sir J. Vogel, K.C.M.G.

Feb. 18, 1876.—Completion of the work of laying the telegraph cable between New Zealand and New South Wales.

June, 1876.—Death of Dr. Isaac Earl Featherston, while acting as Agent-General for the colony in England. He was the first to hold that office, and had previously been Superintendent of the Province of Wellington from the time of the first establishment of provincial representative institutions.

Sept. 1, 1876.—Resignation of Sir J. Vogel's Ministry in view of the appointment of Sir J. Vogel as Agent-General. Formation of a Ministry under the premiership of Major Atkinson.

Sept. 13, 1876.—Resignation of Major Atkinson's Ministry in consequence of doubts being entertained as to the constitutional position thereof. Reconstruction of the Ministry under the premiership of Major Atkinson.

Nov. 1, 1876.—"The Abolition of Provinces Act, 1875," came into full operation. Complete abolition of provincial institutions. The colony subdivided into counties and municipal boroughs.

Oct. 8, 1877.—Defeat of the Atkinson Ministry on a vote of want of confidence moved by Mr. Larnach.

Oct. 15, 1877.—Appointment of a Ministry under the premiership of Sir George Grey, K.C.B.

Nov. 29, 1877.—The Education Act, providing for the free and compulsory education of children, passed.

April 11, 1878.—Bishop Selwyn died, in England.

Oct. 29, 1878.—Sir George Grey's first land-tax passed.

Feb. 29, 1879.—Departure of Governor the Marquis of Normanby, P.C.

Mar., 1879.—Removal of surveyors from the Waimate Plains by Natives acting under Te Whiti's orders.

Mar. 27, 1879.—Arrival of Governor Sir Hercules G. R. Robinson, G.C.M.G.

May 25, 1879.—The Natives from Parihaka, by order of Te Whiti, began ploughing up lands occupied by Europeans.

June, 1879.—Arrest and imprisonment of 180 of these Natives for causing disturbances.

July 29, 1879.—Defeat of the Grey Ministry on an amendment to the Address in Reply, moved by Sir William Fox, followed by a dissolution of Parliament.

Oct. 3, 1879.—Defeat and subsequent resignation of Sir George Grey's Ministry.

Oct. 8, 1879.—Appointment of a Ministry under the premiership of the Hon. John Hall.

Dec. 19, 1879.—An Act passed to assess property for the purpose of taxation.

Dec. 19, 1879.—The Triennial Parliament Act passed.

Dec. 19, 1879.—An Act passed to qualify every resident male of twenty-one years of age and upwards to vote.

June, 1880.—First portion of the Parihaka Maori prisoners released by the Government.

July 9, 1880.—Bounty Island taken possession of by Captain George Palmer, H.M.S. "Rosario."

Sept. 8, 1880.—Departure of Governor Sir Hercules G. R. Robinson, G.C.M.G.

Oct. 1880.—Release of the last portion of the Parihaka Maori prisoners.

Oct. 26, 1880.—Sir Francis Dillon Bell appointed Agent-General.

Nov. 29, 1880.—Arrival of Governor Sir A. H. Gordon, G.C.M.G.

April 29, 1881.—"Tararua," steamer, wrecked; 130 lives lost.

June 26, 1881.—Severe earthquakes in Wellington.

Nov. 5, 1881.—March of force of Constabulary and Volunteers on Parihaka, and arrest of Te Whiti and Tohu, without bloodshed.

Feb. 15, 1882.—First shipment of frozen meat made from Port Chalmers. See Year-book, 1893, p. 192.)

April 21, 1882.—Resignation (during the recess) of the Hon. J. Hall's Ministry, and its reconstruction under the premiership of the Hon. F. Whitaker, M.L.C.

June 23, 1882.—Departure of Governor Sir A. H. Gordon.

June 24, 1882.—Assumption of the Government by Sir J. Prendergast, Chief Justice.

Jan. 20, 1883.—Arrival of Governor Sir W. F. D. Jervois, G.C.M.G., C.B.

Jan. 26, 1883.—A direct line of steam-communication between England and New Zealand inaugurated by the New Zealand Shipping Company.

Feb. 13, 1883.—Proclamation of amnesty to Maori political offenders.

Feb. 19, 1883.—Liberation of Te Whiti and Tohu.

Sept. 25, 1883.—Resignation of the office of Premier and his seat in the Ministry by the Hon. F. Whitaker, and the appointment of the Hon. Major H. A. Atkinson to be Premier, the members of Mr. Whitaker's Ministry being confirmed in their offices.

June 11, 1884.—Defeat of Major Atkinson's Government.

June 27, 1884.—Dissolution of the General Assembly.

Aug. 16, 1884.—Resignation of Major Atkinson's Ministry in consequence of the result of the general election. Formation of a Ministry under the premiership of Mr. Robert Stout.

Aug. 20, 1884.—Defeat of Mr. Stout's Ministry by an amendment, expressive of want of confidence, to the Address in Reply being carried.

Aug. 28, 1884.—Appointment of a Ministry under the premiership of Major Atkinson.

Aug. 29, 1884.—Defeat of Major Atkinson's Ministry on a vote of want of confidence.

Sept. 3, 1884.—Appointment of a Ministry under the premiership of Mr. Robert Stout.

Nov. 8, 1884.—An Act passed to enable certain loans of the New Zealand Government to be converted into inscribed stock and the accrued sinking funds released.

Aug. 1, 1885.—The New Zealand Industrial Exhibition opened at Wellington.

June 10, 1886.—Volcanic eruptions at Tarawera, and destruction of the famed Pink and White Terraces; 101 lives lost.

May 28, 1887.—Defeat of Sir Robert Stout's Ministry.

July 15, 1887.—Dissolution of the General Assembly, after prorogation, on the 10th June.

July 21, 1887.—A Proclamation issued declaring the Kermadec Islands to be annexed to and form part of the Colony of New Zealand.

Aug. 17, 1887.—Kermadec Group annexed to New Zealand. Flag hoisted and proclamation read at Sunday Island.

Oct. 8, 1887.—Appointment of a Ministry under the premiership of Major H. A. Atkinson, Sir Robert Stout's Ministry having resigned in consequence of the result of the election.

Dec. 19, 1887.—An Act passed to reduce the number of members of the House of Representatives, after the expiration of the General Assembly then sitting, to seventy-four, including four Maori representatives.

Dec. 23, 1887.—The Australian Naval Defence Act, being an Act to provide for the establishment of an additional naval force on the Australian station, at the joint charge of the Imperial and the several Colonial Governments, was passed by the New Zealand Legislature.

Oct. 27, 1888.—Formal Proclamation of British Protectorate of Cook group of islands, by Captain Bourke, R.N., of H.M.S. "Hyacinth."

Mar. 22, 1889.—Departure of Governor Sir W. F. D. Jervois, G.C.M.G., C.B., from the colony.

Mar. 23, 1889.—Assumption of the Government by Sir James Prendergast.

May 2, 1889.—Arrival of the Earl of Onslow, G.C.M.G.

Sept. 2, 1889.—Electors prohibited by statute from voting in respect of more than one electorate at any election for the House of Representatives.

Nov. 26. 1889.—Opening of South Seas Exhibition, Dunedin.

Dec. 5, 1890.—First election of members of the House of Representatives under a practical manhood suffrage, and on the one-man-one-vote principle.

Jan. 24, 1891.—Notification by Governor of acceptation of resignation (during the recess) of the Hon. Sir H. A. Atkinson's Ministry. Appointment of a Ministry under the premiership of the Hon. John Ballance.

April 22, 1891.—Proclamation by Governor of New Zealand to inhabitants at Rarotonga of appointment of British Resident for the Protectorate of the Cook Islands.

May 25, 1891.—Adhesion of Australia to Postal Union.

Aug. 19, 1891.—Labour-laws: Passing of Employers' Liability Act 1882 Amendment Act.

Aug. 29, 1891.—Labour-laws: Passing of Truck Act, to prohibit payment of wages in goods or otherwise than in money.

Sept. 8, 1891.—Passing of Land and Income Assessment Act for purposes of taxation, and repeal of property-tax.

Sept. 21, 1891.—Labour laws: Passing of an Act for supervising and regulating of factories and workrooms. [Repealed by Act of 1894.]

Jan. 19, 1892.—Electoral districts of the colony based on population as ascertained by the results of the census of 1891 proclaimed.

Feb. 2, 1892.—Departure of Governor the Earl of Onslow.

Feb. 25, 1892.—Assumption of the Government by Sir James Prendergast, Chief Justice.

June 7, 1892.—Arrival of Governor the Earl of Glasgow, G.C.M.G.

June 28, 1892.—Death of Sir H. A. Atkinson, K.C.M.G., Speaker of the Legislative Council, and previously four times Premier.

Oct. 1, 1892.—Labour-laws: Passing of Contractors' and Workmen's Lien Act.

October 8, 1892.—Passing of Dairy Industry Act. [Repealed by Act of 1894.]

Oct. 11, 1892.—Passing of first Land-tax and Income-tax Act on the basis of the Assessment Act of previous year.

Oct. 11, 1892.—"Land Act, 1892": Lease in Perpetuity without revaluation system introduced: occupation with right of purchase: optional method of selection: small farms associations.

Oct. 8, 1892.—"Land for Settlements Act, 1892," authorising purchase of lands from individuals for purposes of subdivision. [Repealed by Act of 1894. See *post.*]

April 19, 1893.—Cheviot Estate taken over by Government under the Land and Income Assessment Act.

April 27, 1893.—Death of Hon. John Ballance, Premier of New Zealand.

May 1, 1893.—Resignation of the Ministry in consequence of the death of the Hon. John Ballance, and appointment of a new Ministry under the premiership of the Hon. R. J. Seddon.

June 23, 1893.—Death of Sir William Fox, K.C.M.G.; four times Premier of New Zealand.

Sept. 2, 1893.—Passing of Bank-note Issue Act, to make bank-notes a first charge on assets and to enable the Government to declare them to be a legal tender, &c.

Sept. 8, 1893.—The Legislative Council of New Zealand passed, by a majority of two, the Bill conferring the franchise on women.

Sept. 14, 1893.—Banks and Bankers Act Amendment Act passed, to permit of increase of capital by issue of new shares.

Sept. 19, 1893.—"The Electoral Act, 1893," extending franchise to women.

Oct. 2, 1893.—Alcoholic Liquors Sale Control Act passed: New licenses to be granted subject to the votes of the electors: reduction or abolition of licenses if desired.

Oct. 6, 1893.—Passing of "Criminal Code Act, 1893."

Oct. 6, 1893.—Labour-laws: Passing of "Workmen's Wages Act, 1893."

Oct. 6, 1893.—Native Land Purchase and Acquisition Act.

Oct. 20, 1893.—Sir James Prendergast appointed temporarily Deputy of the Governor.

Nov. 28, 1893.—A general election took place, being the first occasion on which women exercised the franchise.

Dec. 28, 1893.—Death of Right Rev. Dr. Henry John Chitty Harper, formerly Bishop of Christchurch and Primate of New Zealand.

Mar. 19, 1894.—Sir James Prendergast appointed temporarily Deputy of the Governor.

June 30, 1894.—Passing of Act to extend operation of Bank-note Issue Act, and another Act to control the transfer of bank shares.

June 30, 1894.—"Bank of New Zealand Share Guarantee Act, 1894," to guarantee special issue of shares to amount of £2,000,000, and purchase of Assets Estates Company by Assets Board. [Amended on July 20.]

July 20, 1894.—Passing of an Act to limit number of bank directors and power of shareholders to transfer their shares.

Aug. 21, 1894.—Labour-laws: Passing of Conspiracy Law Amendment.

Aug. 31, 1894.—Labour-laws: Passing of an Act to encourage the formation of industrial unions and associations, and to facilitate the settlement of industrial disputes by conciliation and arbitration.

Oct. 18, 1894.—"New Zealand Consols Act, 1894."

Oct. 18, 1894.—"Government Advances to Settlers Act, 1894," for relief of settlers burdened by high charges of interest, &c.

Oct. 18, 1894.—Passing of "Land for Settlements Act, 1894," authorising acquisition of private lands for purposes of settlement, with compulsory powers, and repealing Act of 1892; also "Lands Improvement and Native Lands Acquisition Act, 1894."

Oct. 18, 1894.—Labour-laws: Passing of "Shops and Shop-assistants Act, 1894," for limiting hours of business in shops.

Oct. 23, 1894.—Passing of "Banking Act, 1894."

Oct. 23, 1894.—Dairy Industry Act, to regulate manufacture of butter and cheese, with inspection and grading for export, and provide for purity of milk.

Oct. 28, 1894.—Wreck of s.s. "Wairarapa" at Great Barrier Island; 135 lives lost.

Mar. 29, 1895.—Death of Right Reverend Andrew Burn Suter, D.D., formerly Bishop of Nelson, and Primate of New Zealand.

May 27, 1895.—Government assumed management of the Midland Railway.

Aug. 3, 1895.—Death of C. W. Richmond, Puisne Judge of Wellington.

Aug. 20, 1895.—Trustees cemeteries authorised to provide for cremation of dead.

Sept. 4, 1895.—"Bank of New Zealand and Banking Act, 1895," providing for writing off paid-up capital with proceeds of first call on reserve liability. Also for new capital and Assets Realisation Board, &c. Also to purchase business of any other bank.

Sept. 20, 1895.—Labour-laws: Passing of an Act to regulate attachment of wages.

Sept. 20, 1895.—Labour-laws: Passing of Servants' Registry Office Act.

Sept. 20, 1895.—"Family Homes Protection Act, 1895," to secure homes for the people and to prevent them from mortgage or sale for debt.

Oct. 18, 1895.—Amended tariff passed.

Oct. 31, 1895.—Bank of New Zealand and Banking Act Amendment Act: Sale of Colonial Bank business to Bank of New Zealand.

Dec. 20, 1895.—Appointment of Sir P. A. Buckley, K.C.M.G., as a Judge of Supreme Court.

Jan. 10, 1896.—Hon. W. P. Reeves appointed Agent-General in London.

Mar. 26, 1896.—Brunner Mine explosion; sixty-seven deaths.

April 12, 1896.—General census of colony taken for Sunday night.

May 18, 1896.—Death of Sir Patrick Buckley, K.C.M.G.

July 11, 1896.—Appointment of Mr. W. B. Edwards as a Judge of the Supreme Court.

July 19, 1896.—Death of Hon. Robert Pharazyn, M.L.C.

Aug. 2, 1896.—Death of James Edward FitzGerald, C.M.G., Controller and Auditor General.

Oct. 16, 1896.—Land for Settlements Act amended: Special provision made for disposal of highly improved lands acquired: preference given to landless people: Boards may select applicants, &c.

Oct. 17, 1896.—Alteration of franchise by abolition of non-residential or property qualification.

Oct. 17, 1896.—Government Valuation of Land Act passed.

Dec. 4, 1896.—General election of members of House of Representatives for the new districts as fixed by the Representation Commissioners on basis of Census, 1896.

Feb. 6, 1897.—Departure of the Earl of Glasgow, G.C.M.G.

Feb. 8, 1897.—Sir James Prendergast Administrator of Government.

June 22, 1897.—Diamond Jubilee of reign of Her Majesty Queen Victoria. Hon. R. J. Seddon, Premier of New Zealand, called to Privy Council, on occasion of his visit to England with contingent New Zealand Forces.

July 29, 1897.—Wreck of s.s. "Tasmania" at Mahia Peninsula; ten lives lost.

Aug. 10, 1897.—The Earl of Ranfurly assumed office as Governor.

Dec. 22, 1897.—Act to establish at Wellington the Victoria College, in connection with the New Zealand University.

July 15, 1898.—Hon. Sir Francis Dillon Bell, K.C.M.G., C.B., died.

1898.—Death of Sir George Grey, K.C.B.

1898.—Death of Bishop Selwyn, of Melanesia.

Oct. 15, 1898.—The Municipal Franchise Reform Act passed.

1898.—The Divorce Bill passed both Houses. Her Majesty's assent thereto gazetted 13th April, 1899.

Nov. 1, 1898.—An Act to provide for Old-age Pensions passed.

Feb. 10, 1899.—Rev. William Colenso died at Napier.

March 13, 1899.—Sir Julius Vogel, K.C.M.G., died.

April, 1899.—Victoria University College opened in Wellington.

May 25, 1899.—Resignation of Sir James Prendergast, Chief Justice.

June 1, 1899.—"The Divorce Act, 1898" (assented to by Her Majesty the Queen), came into operation.

June 22, 1899.—Sir Robert Stout, K.C.M.G., appointed Chief Justice.

Oct. 19, 1899.—Act passed constituting Labour Day. The second Wednesday in the month of October in each year to be a public holiday.

Oct. 21, 1899.—N.Z. Contingent (the first) consisting of 215 officers and men, left in s.s. "Waiwera" for Algoa Bay to assist the British in the Transvaal war.

Nov. 16, 1899.—General Assembly dissolved.

Dec. 6, 1899.—General Election of Members of House of Representatives.

Jan. 21, 1900.—The second N.Z. Contingent (258 officers and men) left for South Africa in s.s. "Waiwera."

Feb. 5, 1900.—Hon. Thomas Dick died.

Feb. 17, 1900.—The third N.Z. Contingent (264 officers and men) left for South Africa in s.s. "Knight Templar."

March 24 and 31, 1900.—The fourth and fifth Contingents (1,060 officers and men) left for South Africa in s.s.'s "Monowai," "Gymeric," "Waimate," and "Maori."

June 28, 1900.—"Bubonic Plague Prevention Act, 1900," passed.

Aug. 8, 1900.—"Immigration Restriction Act, 1899," assented to by Her Majesty in Council, came into operation.

Oct. 13, 1900.—Public Health Act passed.

Oct. 18, 1900.—The Maori Council's Act passed.

Oct. 20, 1900.—"The Representation Act, 1900," passed, increasing number of European representatives to seventy-six.

Dec. 29, 1900.—Hon. Sir James Prendergast, Kt., appointed Deputy-Governor.

Jan. 1, 1901.—Universal penny postage adopted by New Zealand.

Jan. 22, 1901.—Queen Victoria died.

Jan. 28, 1901.—Accession of King Edward VII. proclaimed in New Zealand.

Jan. 30, 1901.—Sixth N.Z. Contingent (578 officers and men) sailed for South Africa in s.s. "Cornwall."

Feb. 21, 1901.—Appointment of Mr. Theo. Cooper as a Judge of the Supreme Court.

March 31, 1901.—General census of the Colony taken for Sunday night.

April 6, 1901.—Seventh N.Z. Contingent (600 officers and men, roughriders) sailed for South Africa, per s.s. "Gulf of Taranto."

May 22, 1901.—Deceased Husband's Brother Marriage Act came into operation after Royal assent.

June 10, 1901.—Duke and Duchess of Cornwall and York arrived in New Zealand.

June 10, 1901.—Boundaries of Colony extended to include Cook and other Pacific Islands.

Aug. 6, 1901.—Sir John McKenzie, K.C.M.G., died.

GENERAL INDEX.

	Page
"Accident Insurance Act, 1899"	233
Acclimatisation. (See Year-book, 1894, p. 431.)	
Accumulation, Prices and Wages	222
Development of Banking...	222
Acres and Yield in Corn-crops	330
Acres of Land under Crop	331
Administration of Land-laws, &c.	431
Advances to Settlers	444
Loans for	444
Table showing how repaid	448
Titles eligible	445
Valuation-fees	447
Agents for the Colonies, Crown	26
Agent-General in London	25
Ages at Death	295
,, Average	295
Average, of Persons married	287
Of Prisoners	164
Agricultural College, Lincoln	173
Agricultural Statistics	329
Agriculture and Live Stock	262, 329, 472
Acreage under Wheat, Oats, &c., in Provincial Districts ...	330
Artificial Manures	482
Barley	339, 477
Cape Barley and Winter Oats	486
Cattle	271, 487, 490
Cereals	330, 476
Composition of Roots	481
Consumption of Wheat	336
Cost of growing Oats	477
Cost of working a Farm	486
Dairy Industry, The	491
Dairy Stock	272, 490
Fertilisers	482
Fruit Industry, The	493
Gardens and Orchards	340
Grass-seeds	340, 484
Hops	339
Horses	273, 487
Lambing Returns, Averages	271
Mangolds and Carrots	480
Maize	338
Oats	338, 477
Pigs	274, 488
Potatoes	339, 478
Poultry	492
Rape	479
Root-crops	478
Sheep	268, 488
Tree-planting...	495
Turnips	339, 478
Wheat-crop of Australian Colonies	336

	Page
Agriculture—*continued.*	
Wheat-crop of the World, 1893 to 1897	336
Wheat for Threshing	335
Wheat held by Farmers, 1900	335
Wheat, Seed per Acre	477
Wheat, Yield per Acre	330, 477
"Aid to Public Works and Land Settlement Act, 1896"	394
Alcoholic Liquors, Consumption of, 1895 to 1899	160
Aliens Naturalised	283
Alluvial Mining	348
Animals (see Live-Stock)	266, 437
Annual Pensions paid by Government	71
Antipodes Islands	6
Appendix—	
Dates of certain Principal Events in the History of New Zealand	602
Apprehensions and Summonses	157
Area of New Zealand	7
Of North, Middle, Stewart, Chatham, and other Islands	7
Of United Kingdom compared with New Zealand	7
Areas of Australasian Colonies	6
Compared with European Countries	7
Area under Cultivation in Counties	332
Arbor Day, Tree-planting	495
Arms, Ordnance, &c.	54
Arrests for Drunkenness	160
Arrivals and Departures	375
Chinese	375
Departures, how Numbers ascertained	376
Excess of Arrivals over Departures	378
Articles on Special Subjects	431
Artificial Manures	482
Artillery, Naval, Field, and Garrison	53
Assembly, General	29
Assets Realisation Board	226, 414
Associations, Special-Settlement	440
Assurance, Industrial Life	232
Asylums, Benevolent	316
Lunatic	316
Orphan	316
Auckland Docks	56
Graving-dock Charges	56–61
Auckland Islands	6, 14
Auckland Land District—Introductory, Physical Features, Plains, Lakes, Forests, Soils; Rainfall; General Products and Industries; Chief Towns; Crown or Native Lands available for Future Settlement	534
Auckland Provincial District, Progress of Nine Years	426
Auckland Sailors' Home	316
Australasian Railways	253
Australasian Stock, Prices of	409
Australian Colonies, Area of	6
Debt of	410
Friendly Societies in	230
Mineral Production of	346
Railways in	254
Live-Stock in	268
Oat-crop of	338
Population	374
Taxation in	399
Trade	150
Wheat-crop of	336

	Page
Average Quantity of Milk to 1 lb. Butter...	491
Average Yield of Butter or Cheese	491
Bachelors and Spinsters in New Zealand	285
Banking, Development in	222
Banking Legislation, Special	224
"Bank Directors and Shares Transfer Act, 1894"	225
"Bank-note Issue Act, 1893"	224
Bank of New Zealand and Banking Acts, 1895 and 1898 ...	225, 226
"Bank of New Zealand Guarantee Act, 1894"	224
"Banks and Bankers Act Amendment Act, 1893"	224
"Bank Shareholders Act, 1894"	225
Bankruptcy	154
Petitions, &c., Five Years	154
Transactions in 1899	154
Banks of Issue—	
Advances and Discounts	223
Assets and Liabilities	222
Deposits	222
In all Classes of Banks, Average per Head	228
Notes in Circulation, &c.	222
Banks—	
Post-Office Savings	227
Deposits, Withdrawals, Open Accounts, Amounts to Credit ...	227
Securities held	227
Private Savings	228
Deposits, Withdrawals	228
Barley, Acreage and Actual Yield of, in Provincial Districts	330
Yield in Bushels	330
Export of	135
Beer, Consumption of, per Head, Five Years	160
Beer, Excise Duty on	96
Benevolent Asylums and Charitable Institutions	316
Birth-rates per 1,000 of Population in Australasian Colonies	277
Decline of, in New Zealand	276
Births	276
Illegitimate	279
Illegitimacy in Australasian Colonies	280
In Australasian Colonies, Proportion of Illegitimate	280
Legitimation Act	281
Of Twins	279
Proportion to Population, 1882–1900	276
Rates in Australian Colonies	277
To Marriages, Proportion of	276
Blind, The. (See Year-book, 1899, p. 136.)	
Blind, Institution for the	186
Boroughs—	
Expenditure of	193
In Colony	363
Auckland, with suburbs	366
Christchurch, with suburbs	366
Dunedin, with suburbs	366
Wellington, with suburbs	366
Indebtedness of	193
Population of	363
Rateable Value of Property in	198
Revenue of	193
Value of Land and Improvements in	357
Boundaries and Area of the Colony	5

Boundaries extended—see Inset at page 6.
Page
Bounty Island 6
Breadstuffs in various Countries and Colonies, Consumption of 336
Bubonic Plague Prevention 301
Building Societies 229
Amounts deposited with 229
Income, Assets, Liabilities, Reserve Funds 229
Butter and Cheese 136, 491
Export to United Kingdom, Twelve Years 136
Factories and Creameries... 342
Grading 342, 492
Industry 341, 491

Cadet Corps 54
Cadets in Government Service to be Volunteers 49
Campbell Islands 6
Cancer, Deaths from 308
Decennial Return 311
Increase in 309
Part of Body affected 310
Proportion of Deaths per 10,000 living, 1891-1900 309
Canterbury Agricultural College 173
Canterbury Land District—Boundaries and Physical Features, Scenery, Climate; Internal Communication; Geological Formation; Area, Nature, and Disposition of Lands; Soils; Pasturage and Crops; Stock, Wool, Butter and Cheese, Timber, Fruit; Coal, Building-stones; Fisheries; Manufactories; Libraries and Churches; Educational and other Institutions; Towns 578
Canterbury Provincial District: Progress of Nine Years 428
Cape Barley and Winter Oats 486
Capital City, Population of 366
Capitation to Efficient Volunteers and Cadets 55
Carrots 480
Cattle 271, 487
In Provincial Districts 272
Causes of Death 296
At Four Centres 292
Cancer 308
Developmental Diseases 313
Local Diseases 313
Measles 301
Old Age 313
Phthisis 304
Proportion of Deaths from each 296
Typhoid Fever 301
Violence 314
Cavalry Volunteers 53
Cereals 476
Charges, Survey, on Unsurveyed Lands 443
Charitable Institutions, Benevolent Asylums and, &c. 316
Chatham Islands 6, 13
Cheese and Butter 136, 491
Factories, Number of 342
Cheviot Estate. (See Year-book, 1895, p. 264.)
Children to a Marriage, Number of 276
Chinese—
Immigration and Emigration of 375
Number in Colony 361
Poll-tax on 379

	Page
Churches	186
Attendance at	187
Denominations of	187
In Provincial Districts	188
Schoolhouses and Dwellings used as	187
Cities	366
Civil Cases	153
Civil Establishment at Seat of Government	34
"Civil Service Insurance Act, 1893"	73
Classification of Lands, &c.	438
Climate—	
Temperature in New Zealand, Australia, and other British Possessions	258–261
Clips, Average Wool-	488
Clothing, Imported, Value of	102
Coal	349
Classes of, in New Zealand	352
Consumption of	349
Export of	349
Found in Colony, Analysis of	351
Import of	349
Output of	349
"Coal-mines Act, 1891"	248
Colleges and University	178
Colonial Office, The	26
Colonies, Area of the Australian	6
Colonisation of New Zealand	3
Colony, Boundaries and Area of the	5
Crown Agents for the	26
Population of the	359
Progress of, Nine Years	426
Communication and Transport	250
Consols, New Zealand	394, 466
"Conspiracy Law Amendment Act, 1894"	247
Constitution	14
Government	15
Consumption of Beer	106, 160
Consumption, Principal Articles of	238
Consuls, Foreign	24
Contingents for South Africa	430
Convictions	157
For Drunkenness	161
Summary	160
Convictions of Maoris	162
Cook Islands, Description of. (See Year-book, 1895, p. 456.)	
Cook Islands, inclusion of, in Colony of New Zealand (inset to face, p. 6).	
Cook Strait	10
Corn-crops, Acreage, and Actual Yield of	330
Cost of Living in New Zealand and in Various Countries	238
Management of Local Governing Bodies	194
Railways	254
Working a Farm in New Zealand	486
Council, Executive, 1843–56	20
Council, Executive, June, 1901	28
Legislative, Roll of Members of the	30
Successive Speakers of the Legislative	23
Counties, Population of	363
Land under Cultivation in	332
Value of Land and Improvements in	355
Court, Validation	37

	Page
Courts, Bankruptcy	154
Civil Cases, Supreme and District	153
Divorce and Separation	154
Magistrates', Civil Cases	153
Charges for Offences before	157
Committals	157
Punishment on Summary Convictions (five years)	159
Summary Convictions before	158
Sentences, Supreme and District (five years)	159
Supreme and District, Convictions	157
Cows, Average Annual Yield of Milk	491
Creameries and Butter Factories	342
Crime, Law and	153
Cross-breeding of Sheep	488
Crown Agents for the Colonies	26
Crown Lands occupied	262
Mode of acquiring	438
Crown Lands of New Zealand	262, 416, 431
Cultivation. (See also Agriculture.)	
Barley	339, 477
Cost of Working a Farm	486
Extent of Land in	331
Fertilisers	482
Gardens and Orchards	340
Hops	339
Land in Sown Grasses in Australasian Colonies	341
Under Crops in Provincial Districts	331
Maize	338
Oats	338, 477
In Australasian Colonies	338
Peas and Beans	339
Potatoes	339, 478
Root-crops	478
Rye	339
Seeds and Sown Grasses	340, 483
Tobacco	340
Turnips	339, 478
Wheat	335, 476
In Australasian Colonies	336
Customs Duties, Rates levied	82
Revenue from	123
Proportion of Taxation in Australasian Colonies derived from, 1899-1900	400
Cyanide Process, The	346
Cyanide Process Gold-extraction Act	348
Dairy Factories	342
Dairy Industry	341, 491
Government Aid to	342
Produce, Export of	136
Stock	272, 490
Dates of Principal Events	602
Deaf and Dumb. (See Year-book, 1899, p. 134.)	
Deaf-mutes, Institution for	186
Death, Average Age at	295
Causes of	296
Death-rates in various Countries and Colonies, 1890-1900	290
From Cancer	308
Congenital Defects	313
Nervous Diseases	313

Death-rates in various Countries and Colonies, 1890-1900—*continued.* Page
From Phthisis 304
From Typhoid Fever 301
In Four Principal Cities 290
In Principal Cities of Australasia 295
Deaths 289
At various Age-periods 295
Inquests on 167
Number of, in 1900 289
Of Infants 295
Of Infants to every 1,000 Births 295
Of Publicans, &c. 303
Violent 314
Debt, General Government (see Public Debt) 401
Of Local Bodies 193, 196
Deceased Persons' Estates 234
Duties Payable on 99
Defences, Military and Naval—
Administration; Artillery, Permanent Militia; Bearer Corps, Volunteers; Cadet Corps, Volunteers; Capitation; Cavalry, Volunteers; Cycle Corps, Volunteers; Engineers, Volunteers; Enrolment, &c.; Expenditure and Maintenance; Field Artillery, Volunteers; Instructors; Militia and Volunteer Districts; Mounted Rifles, Volunteers; Naval Artillery, Volunteers; Ordnance, Arms, &c.; Rifle Corps, Volunteers; Torpedo Corps, Permanent Militia 52
Deferred-payment System, Land taken up on 416, 419
Degree of Education 169
Departures, Arrivals and 375
Deposits in Banks 222
Depots for Shipwrecked Mariners 56
Description of Marlborough Sounds 517
Description of Otago Lakes 523
Despatch of New Zealand Troops to South Africa 430
Diarrhœal Diseases, Deaths from 301
Digest of the Land-laws 437
Diphtheria, Deaths from 301
Discovery and Early Settlement 2
Discovery of Gold in New Zealand. (See Year-book, 1894, p. 343.)
Diseases, Various, Deaths from 297
District Court, Civil Cases 153
Districts, Militia and Volunteer 52
Divorce, Petitions and Decrees, 1895-1899 155
Divorce and Separation 154
Grounds for 155
Docks, Graving, and Patent Slips 56
Drainage Board, Revenue, Expenditure, and Loans 194-196
Dredging, Gold-, Description of. (See Year-book, 1899, p. 509.)
Drunkenness 159
Persons convicted of 160
Duties and Functions of Representation Commissions 319
Duties on Estates of Deceased Persons 99

Early Settlement, Discovery and 2
Earnings of the People 237
Wages 241-244
Ecclesiastical 50
Education (see Public Instruction, also Schools) 169
Public (Government) Schools 171
School of Engineering and Technical Science 173
Technical 173

	Page
Education—*continued.*	
University, New Zealand	178
Victoria College	178
Education Boards, Income and Expenditure of	183
Education, Degree of	169
Improvement in	169
Egmont, Mount	9
Election, General. (See Representation.)	
Electoral. (See Representation.)	
"Electoral Act, 1893," extends Franchise to Women... ...	16, 320
"Electoral Act Amendment Act, 1896," abolishes property qualification	16, 320
Electric Telegraph	257
Emigration. (See Immigration and Emigration.)	
"Employers' Liability Act, 1882"	247
Engineering, School of	173
Engineers, Volunteers	54
Enrolment of Permanent Militia	55
Erratum. (See back of Half-Title.)	
Estates of Deceased Persons, Value of	234
Duties Payable on	99
Estates offered for Selection under Land for Settlements Act, during Year 1900-1901	424
European Population of Colony	359
Excise Duty on Beer	96
Executive Council, 1843-56	20
Expenditure, Revenue and	384
Charges of Public Debt	406
General Government	384
Local Bodies	193
On Railways	253, 254
Out of Public Works Fund by General Government	412
Exports	126
Butter and Cheese to United Kingdom, for Twelve Years	136
Coal	127, 349
From different Ports	137
From United Kingdom to various Countries and Colonies	152
Frozen Meat	134
Quantity, Nineteen Years	134
Value, Thirteen Years	130
Gold, Silver, and other Minerals to 31st December, 1900	343
Gold, 1900	135
Grain	135
Home Produce	126
Increase and Decrease on Principal Articles	130
Kauri-gum	137
Of Australasian Colonies...	150
Phormium	137
Quantities of Principal Articles, 1899 and 1900	126-129
Rabbitskins	133
Re-exports, exclusive of Specie	131
Of New South Wales compared with New Zealand	131
Sheepskins and Pelts	134
Tallow	134
Timber	127, 129
To United States	150
Value of principal Articles of New Zealand Produce	126
Wool, Thirteen Years	132
External Trade of Australasia	151
Factories, Butter and Cheese	342

Page
Factories Act, 1894 246
Factories Acts. (See Year-book, 1894, p. 220.)
Farming, Dairy 490
Farming, Ostrich 275
Farm in New Zealand, Cost of Working a 486
Features of the Middle Island, Physical 10
Of the North Island 7
Fees Payable under Land Transfer Act 97
Finance 384
Fire Inquests 168
Fish Acclimatised. (See Year-book, 1894, p. 431.)
Fish and Fisheries. (See Year-book, 1895, p. 373.)
First Offenders' Probation Act 166
Flax, Export of 137
Flocks of Sheep, Number and Size of 133
Foreigners Naturalised during last Nineteen Years, Number of 283
Foreign Consuls 24
Foveaux Strait 13
Franchise 16
Municipal 199
Freezing Establishments in the Colony. (See Year-book, 1894, p. 314.)
Friendly Societies 229
In Australasia 230
Lodges, &c., Assets, Receipts of Sick and Funeral Funds, Expenditure, Sick Pay, Management Expenses 229
Frozen-meat Industry (see also Year-book, 1894, p. 311) 134
Fruit Culture 493
Drying 493
Industry, The 493
Fungus, New Zealand, Export of 127, 129

"Gaming and Lotteries Act, 1881," Permits issued under 429
Gaols, Prisoners in 163
Gardens, Plantations, and Orchards, Total Acreage in 340
General Assembly, The 29
General Election, 1899 320
Glaciers in Middle Island 11
Gold, Coal, and other Minerals 343
Coal-mining 349
Composition of 351
Consumption of 349
Output of 349
Gold exported 135
Total Quantity and Value entered for Exportation, 31st March, 1901 345
Gold produced 343
Gold produced in Australia 344, 346
Gold-dredging, Descriptive Account. (See Year-book, 1899, p. 509.)
Gold-mining, Result of—Hands, Output, &c. 343-348
Remarks on 344
Saving Gold by Cyanide Process 346
Governing Bodies, Local 189
"Government Loans to Local Bodies Act Amendment Act, 1899" ... 197
Government Advances to Settlers 444
Advances authorised 452
Business of Office 444
Conditions of Advance 446
Costs and Fees 447, 451
First Meeting of Board 452
Fixed Loans 447
Half-yearly Repayments, Table of 448

Government Advances to Settlers—*continued.* Page
Instalments of Loans payable at Post-offices 451
Instalment Mortgages 447
Officials bound to Secrecy 452
Terms of Loans 447
Titles eligible for Advances 445
Government Aid to Dairying 342
Government Life Insurance Department 232, 469
Government Schools 171
Government, the Seat of 16
Government Valuation of Land and its Improvements ... 353, 457
Capital Values, North and South Islands 354
Comparison of Capital Values, 1891 and 1898 354
Cost of making Valuation, How Borne 353, 457
Increase in Values 354
Objection, Right of 353
Purposes for which Valuation-rolls used 353, 457
Values in Boroughs 357
Values in Counties 355
Governor of New Zealand 27
Governors, Successive 17
Grading of Dairy Produce 342
Grain exported 135
Grown in each Provincial District (see also Cultivation) 330
Grass Lands, Acres of 331, 340
In Australasian Colonies, 1899-1900 341
Grass-seed 483
Sown, per Acre 340
Graving-docks and Patent Slips 56
Auckland Docks 56
Lyttelton Dock and Patent Slip 59
Port Chalmers Dock 59
Nelson Cradle 61
Timaru Slip 61
Wellington Patent Slip 58
Grazing-runs, Small 416-419, 441
Green Crops, Acreage under, in Provincial Districts 331
Gum, Kauri 137
Export of 137
Price of 137

Hanmer Thermal Springs—Accommodation, &c.; Analysis of Springs; Benefit Derived from using Springs; Charges, &c.; Climate; Directions for using Baths; Journey to Hanmer; Masseuse available; Medical Attendance; Tourist Season 512
Harbour Boards Revenue, Expenditure, and Loans 194-196
Harbours. (See Year-book, 1894, pp. 389-408.)
Harbours—Pilotage, Port Charges, &c. 61
Hawke's Bay Land District—General Description; Communication; Pastoral Industries; Agricultural Pursuits; Dairying; Timber and other Industries; Climate; Towns; Crown Lands; Native Lands 550
Hawke's Bay Provincial District: Progress in Nine Years 427
Hay, Acres in 331
Hemp, New Zealand (*Phormium tenax*) exported 137
Holdings, Number of occupied 262
Home Produce exported 126
Honours held by Colonists 26
Hops, cultivated, imported and exported 339
Horse-breeding 490

Page
Horses in New Zealand, Number of 273
In Provincial Districts 273
Hospitals 314
Accommodation and Indoor Patients 315
General Management 315
Number of Districts 314
Revenues of Boards, how raised 314
Hot Springs (see Thermal Springs) 503, 509, 512
House of Representatives 15, 31
Speakers of the 24
Houses, Licensed 216

Illegitimate Births in Australasian Colonies 280
Immigration and Emigration 375
Each Australian Colony 378
From United Kingdom, Australian Colonies, and other Places ... 377
Gain by net Immigration from United Kingdom in Ten Years ... 377
Nominating Immigrants discontinued 375
Of Chinese 375
Poll-tax on Chinese 379
To United Kingdom, Australian Colonies, and other Countries ... 377
Imports and Exports 100, 126
Each Australian Colony, 1899 150
Imports—
Beer, Spirits, and Wine, Consumption of 106, 160
Clothing, &c. 102
Coal 103, 349
Free and Dutiable Imports, Value of 104
From different Countries, 1899 and 1900, Values of 107
United Kingdom 107
United Kingdom to Australasia 152
United States, Ten Years 150
Inclusive and exclusive of Specie, Thirteen Years 100
Into Australasia 150
Per Head of Population 101
Spirits 106
Sugar and Tea, Imports of 105
Consumption of, per Head of Population 105
Tobacco, Consumption of 106
Trade per Head of Population, Australasian Colonies 151
Improved-farm Settlements 416-419, 441
Improvement in Education of the People 169
Income-tax, Land and 452
Exemptions 453
Rates of Tax 456
Yield of Tax 455
Income-tax levied 398, 454
Growth of Amount Paid 399
Incomes and Earnings 237
Indebtedness of the Australasian Colonies 410
Of Local Bodies 193-197
For Twenty Years 190
To Persons outside Colony 196
Industrial Schools 184
Industrial Life Assurance 232
Inebriates Institutions Act 162
"Infant Life Protection Act, 1896" 282
Influenza, Deaths from 301

	Page
Inquests, Death	167
Fire	168
Instruction, State	171
Insurance, Life	232
Companies in New Zealand	232
Government Life	232, 469
Introductory	1
Area of the Australasian Colonies	6
Colony of New Zealand	7
Boundaries and Area of New Zealand	5
Colonisation	3
Constitution	14
Cook Strait	10
Discovery and Early Settlement	2
Foveaux Strait	13
Glaciers in Middle Island	11
Government	15
Maoris, The	4
Outlying Islands	13
Physical Features of the North Island	7
Middle Island	10
Public Works	17
Seat of Government	16
Iron, Machinery, &c., imported, Value of	102
Islands, Description of the—	
Antipodes	6
Auckland	6, 13
Bounty	6
Campbell	6
Chatham	6, 13
Cook (see Year-book, 1895, p. 456)	6
Kermadec	6, 13
Middle	6, 10
North	5, 7
Stewart	6, 13
Joint Stock Companies	229
Jubilee Institution for the Blind	186
Judges, Supreme Court	19
Kauri-gum (Exported)	137
Average Price of	137
Quantities and Values exported	137
Kermadec Islands	6, 13
Labour—	
In New Zealand. (See Year-book, 1894, p. 362.)	
Prices of Provisions, Live-stock, &c., 1900	239, 240
Wages, Average Rates of	241–244
Labour Department, Men assisted by	249
Labour-Laws. (See Year-book, 1894, p. 220.)	
Labour Legislation—	
Acts of Parliament composing	245
Remarks on	245
Industrial Conciliation and Arbitration	246
Coal-mines Act	248
Conspiracy Law	247
Employers' Liability	247

Page

Labour Legislation—*continued.*
Remarks on—*continued.*
Factories Act 246
Master and Apprentice 247
Mining 248
Public Contracts Act 248
Servants' Registry Offices 247
Shipping Acts 247
Shops and Shop-assistants 246
Trades-Union Act 247
Wages Attachment 247
Lakes 9, 12
Lambing Averages... 271
Land—
Acreage of, under Crop 331
And Income-tax 397, 452
Crown, open for Selection. (See Land Districts.)
Fit for Agriculture and Pasture 8
Government Valuation of 353, 457
Grass-sown 340
Held as Pastoral Runs 416, 417
Held as Small Grazing-runs 416–419
Held under Pastoral and Miscellaneous Leases 416, 417
Holdings in Provincial Districts 264
Holdings taken up 262
Holdings taken up, Sizes of 263
Improved Farm Settlements 416–419, 441
Occupation of 262, 416, 431
On Perpetual Lease, Lease in Perpetuity, and Occupation with Right of Purchase 416–419
Rating on Unimproved Value 199, 457
Revenue from 385
Sold for Cash 416–419
Sold on Deferred Payments 416–419
Taken up under various Tenures, Eleven years 418
Taken up in each Land District 420
Tax 397, 452
Graduated 397, 456
Village Settlements, Land held 416–419
Village Settlements, sold on Deferred Payments and for Cash 416–419
Land and Improvements, Government Valuation of 353
Land Districts in the Colony, Description of—Auckland, 534; Canterbury, 578; Hawke's Bay, 550; Marlborough, 563; Nelson, 569; Otago, 588; Southland, 598; Taranaki, 542; Wellington, 555; Westland, 574.
Land for Settlements Acts 422
Annual Rental under 425
Estates offered for Selection during Year ended 31st March, 1901 ... 424
Transactions under 424
Land-Laws, Digest of 437
Administration 437
Classification of Lands, &c. 438
Grazing-runs, Small 441
Improved-farm Settlements 441
Land Districts and Principal Land Offices 438
Mode of Acquiring Crown Lands 438
Optional System of Selection 439
Cash Tenure 439
Leases in Perpetuity... 439
Occupation with Right of Purchase 439
Pastoral Runs 442

Land-Laws, Digest of—*continued.* Page
Residence and Improvements 439
Special-settlement Associations 440
Survey Charges on Unsurveyed Lands 443
Village-homestead Settlements 441
Land Settlements Acts, 1896–1900, Aid to Public Works and 394
Land System of New Zealand 431
Land-tax 397, 452
Land Transfer Act, Fees payable under... 97
Lands—
Native, Purchase of, by Government 435
Survey Charges on Unsurveyed 443
Land under Cultivation in Counties 332
Land, Valuation of—
In Boroughs 357
In Colony 354
In Counties 355
Land-values—
Results of Assessments, 1891 and 1898 354
Total Valuations in Counties and Boroughs 354
Law and Crime 153
Laws, Difference of, between England and New Zealand. (See Year-book, 1896, p. 281.)
Legislation, Special Banking 224
Legislative Council 29
Native Members of the 15
Roll of Members of the 30
"Legitimation Act, 1894" 281
Letters delivered and posted 255
Libraries, Public 188
Licenses and Licensed Houses 216
Licenses—
Issued under "Gaming and Lotteries Act, 1881" 429
Number and Fees paid 216
Proportion to Population 216
Licensing Laws 218
Alcoholic Liquors Sale Control Act 218
Annual Fees 217
Result of Polls taken in December, 1899 219
Revenue from Licenses 216
Life Insurance (see also State Insurance), Year 1899 ... ... 232, 469
Lighthouses, Names and Number of, Colour, Order, &c. 69
Lincoln Agricultural College 173
List, Official 34
Literary and Scientific Institutions 188
Live-stock (see also Sheep and Cattle) 266, 487
Average Prices of 239
Export of 127, 129
In Australasian Colonies 268
In each County 266
Living, Cost of 237
Average Consumption per Head of Foods, &c. (See Year-book, 1898, p. 289.)
In various Countries 238
Loans—
Expenditure, 1900-1901 388
For Advances to Settlers 392
General Government (see Public Debt) 401
Of Local Bodies, Outstanding, at various Rates of Interest 196
Of Local Bodies, Net Indebtedness 195
"Loans to Local Bodies Act Amendment Act, 1899" 197

Page
Local Bodies—
Cost of Management 194
Expenditure of 193, 194
Indebtedness: Twenty Years 190
Number of 189
Outstanding Loans at various Rates of Interest 196
Property in, Value of 198
Rates collected in Twenty Years 190
Revenue and Expenditure of Boroughs, Counties, Drainage Board, Harbour Boards, River Boards, Road Boards, Town Boards... 193, 194
Taxation by 191
Local-Option Poll (1899) 218
Lucerne 486
Lunacy 317
Lunatic Asylums 316
Lunatics, Proportion of 317

Magistrates' Courts, Apprehensions, Convictions, &c. 157
Mail-services between England and New Zealand, Cost of 256
Maize, Area under 338
Manawatu–Wellington Railway 253
Mangolds and Carrots 480
Manual and Technical Instruction 173
Manufactories and Works 153
Manures, Artificial 482
Maoris, The 380
Charged with Offences 162
Children attending Schools 182
Contribute towards Revenue 398
Convicted of Offences, 1891–99 162
Distribution of 383
Enumeration of 382
Half-castes 383
Mythology 530
Population at Last Census 383
Probable Origin and Numbers 380
Proverbs, &c.... 532
Representation 15, 31, 326
Marlborough Land District—Physical Features: Rivers, Plains, Lakes, Forests, Soils, Grazing; Industries; Climate; Towns; Roads and Railways; Crown Lands 563
Marriage, Births to every 276
Decrees for Dissolution of 155
Decrees for Judicial Separation 155
Rates in New Zealand, Australian Colonies, and European Countries ... 284
Marriages 284
Ages at which Marriage may be contracted 288
Ages of Persons Married 287
Of Aborigines 285
Percentage of Persons under 21 Years 289
Proportion by each Denomination 286
Proportion of each Sex signing Register by Mark 287
Marlborough, Nelson, and Westland Provincial Districts: Nine Years' Progress 428
Marlborough Sounds, Description of 517
"Master and Apprentice Act, 1865" 247
Measles, Deaths from 301
Meat, Frozen, Total Export of 134
Medical Practitioners 314

	Page
Medicine, School of, Otago	594
Members of House of Representatives, Roll of	32
Legislative Council, Roll of	30
Members of House of Representatives, Occupations of	326
Metals and Minerals	343
Meteorological Observations	258–261
Miasmatic Diseases, Deaths from	298
Miles of Railway open for Traffic	252
Military and Naval Defences	52
Milk—	
Average Yield of Butter from	491
Average Yield per Cow	491
Mineral Production of Australasian Colonies	344
Minerals, Gold, Coal, and other	343
Mineral Waters of New Zealand. (See Thermal-springs Districts.)	
Mines, Schools of	173
Mining Produce	343
Remarks on	344
Ministers, Officiating, under Marriage Act	289
Ministers, Cabinet	28
Ministries, Successive	22
Miscellaneous Statistics	426
Money-orders and Postal-notes	256
Morioris, The	383
Mortality in Liquor Trade (England)	303
Mortgages	230
Amounts borrowed at various rates of interest	231
Mountains	9, 10
Mount Cook	10
Egmont	9
Ruapehu	9
Tongariro	9
Mounted Rifles, Volunteers	53
"Municipal Franchise Reform Act, 1898," Qualifications for Enrolment under	199
Mutton. (See Frozen Meat.)	
Consumption per head. (See Year-book, 1898, p. 289.)	
Mythology, Maori	530
Native Lands purchased by Government	435
Native Schools	182
Naturalisation	283
Nelson Land District—General Description; Rivers, Lakes, Plains, Forests; Agricultural, Pastoral, Mining; Towns; Railways, Roads, Tracks, &c.; Crown Lands...	569
Nelson, Marlborough, and Westland Provincial Districts: Nine Years' Progress	428
Nervous System, Diseases of, Deaths from	313
Newspapers	75
Posted	255
New Zealand—	
Abolition of Provincial Governments in	15
"Accident Insurance Act, 1899"	233
Area of, Boundaries and	5
Arrival of Missionaries in	3
Captain Cook's Visits to	2
Colonisation of	3
Colony divided into Six Provinces	15
Company	3
County Government in	15

New Zealand—*continued.* Page
Discovery and Early Settlement of ... 2
Electoral Division of ... 319
General Assembly of ... 29
General Election ... 320
Government Advances to Settlers ... 444
Government Life Insurance ... 232
Governor of ... 27
Governors of, Successive ... 17
Land System of ... 431
Lieutenant Hanson's Visit to ... 3
Made a Separate Colony ... 4
Manufactories and Works ... 153
Newspapers ... 75
Permanent Militia ... 52
Premiers of ... 23
Provincial Governments abolished ... 15
Progress, Nine Years ... 426
Rainfall in ... 260
Representative Government granted in ... 14
Settlement at Port Nicholson ... 3
Canterbury ... 4
Nelson ... 4
New Plymouth ... 4
Otago ... 4
Sovereignty of Queen proclaimed ... 3
Stock, Quotations of (Thirteen years) ... 409
Surville, and Marion du Fresne, Visits of ... 2
Tasman's Visit ... 2
Temperature ... 260
Treaty of Waitangi ... 4
University of ... 178
New Zealand Consols—
Currency of Deposits ... 466
Forms of Application ... 467
Rate of Interest ... 466
Regulations ... 466
The purpose of ... 466

Oats—
Acreage and Actual Yield in Provincial Districts ... 330
Export of ... 135
Oat-crop of Australasian Colonies, 1900 ... 338
Occupation of Land ... 262
Occupations of Members of House of Representatives ... 326
Offences—
Charges for, before Magistrates' Courts ... 157
Committals for ... 157
Convictions for ... 158
Maoris charged with ... 162
Convicted before Supreme and District Courts ... 162
Summarily convicted ... 162
Office, The Colonial ... 26
Official List ... 34
Officiating Ministers ... 289
Old-age Pensions—
Amount of Pension ... 462
Applications, how made ... 462
Deductions ... 462

	Page
Old-age Pensions—*continued.*	
How, when, and where paid	462
Number granted to 31st March, 1901	463
Qualifications	461
Optional System of selecting Land	439
Orchards	340, 493
Orphan Asylums	316
Ostrich-farming in New Zealand	275
Otago Lakes, Description of	523
Otago Land District—Boundaries and Area; Physical Description; Rivers and Lakes, Plains, Forests; Building-stones, Coal, Limestone; Climate; West Coast; Fruit, Crops, Stock; Freezing Establishments, Woollen-mills, Clothing-factories, Dairy-factories; Gold Production; Chief Towns; City of Dunedin; Towns and surrounding country; Railways; Statistical; Local Industries	588
Otago Provincial District: Nine Years' Progress	428
Outlying Islands of New Zealand	13
Parcels Post	255
Value of Imports by	122
Parliament, Members of	32
Parliaments, Successive	21
Passengers, Railway	252
Pastoral Leases—	
Lands held under	416-417, 442
Receipts from...	417
Tenants of	417
Patent Slips and Graving Docks	56
Pensions, Annual Paid by Government	71
Pensions, Old-age...	460
Permanent Militia (Artillery)	52
Submarine Miners	53
Permits issued under "The Gaming and Lotteries Act, 1881"	429
Perpetual-lease System, Land held under the	416, 419
Perpetuity, Leaseholds in	416, 419
Phormium tenax (New Zealand Hemp)	
Export of	137
Phthisis, Death-rates from	304
Deaths from, 1891 to 1900	305
Physical Features of the North Island	7
Middle Island	10
Pigs	274, 492
In Counties	266
In Provincial Districts	274
Pilotage, Port Charges, &c.	61
Plantations, Gardens, and Orchards, Acreage in	340
Ploughing, Cost of	476
Population of New Zealand	359
Arrivals and Departures	375
From and to United Kingdom	377
Of Chinese	375
Census, 1901	360
Chinese	361
European	359
Increase in each Quarter, 1900	359
In adjacent Islands	374
In Principal Cities and Suburbs	366
In Provincial Districts	362
Maori	360, 382

Population—*continued.* Page
Of Australasian Colonies 374
Of Boroughs... 363
Of Capital City 366
Of Counties 363
Of Town Districts and Small Centres 367
Of Townships, Villages, &c. 368
Port Charges, Pilotage, &c. 61
Post-offices 255
Average Number of Days within which Mails from London delivered ... 257
Books and Parcels, &c. 255
Increase of Correspondence 255
Letters posted, per Head of Population 255
Mail-service, England and New Zealand, Cost of 256
Money-orders 256
Newspapers 255
Parcels 255
Postal Notes 256
Post-cards 255
Savings-banks 227
Securities 227
Potatoes, Acreage under 339
Cost of Growing 478
Cultivation of... 478
Export of 127, 129
Yield of 478
Practitioners, Medical 314
Premiers of Successive Ministries 23
Preserved Meats exported 127, 129
Prices and Wages 239-244
Prices of Australasian Stock 409
Prices of Provisions, Averages, 1878, 1888, 1898, 1899, and 1900... ... 238
Prices of Provisions, Live-stock, &c., Averages 239, 240
Prices on the Goldfields 239, 240
Principal Events, Dates of 602
Prisoners in Gaol—
Ages of Distinct, convicted 164
Birthplaces of 164
Convicted, Number of 163
Cost of maintaining 165
Distinct convicted, Classified 164
New Zealand-born, convicted, 1899 165
Previously convicted 163
Religious Denominations of 164
Private Railways, Length, Cost, Revenue, and Expenditure 253
Private Schools 180
Private Wealth, Increase of 236
Probation Act, First Offenders treated under 166
Probate, Estates admitted to 234
Produce, Agricultural, Pastoral, and Dairy 136, 330
Average Prices of 239, 240
Mining 343
Progress of New Zealand, Nine Years 426
Property, value of, Rateable 198
Property-tax repealed 397
Prospects of Small Farmers 502
Provincial Districts, Progress for Nine Years 426-428
Provisions, Live-stock, &c., Prices of 239, 240
Public Debt 401
Annual Charge 406

	Page
Public Debt—*continued.*	
Comparison with Past Years	405
Details of Loans	402, 404
Flotation of Loans	409
Increase of	405
Net Indebtedness	405
Of Australasian Colonies	410
Purposes of Money composing Debt	411
Rates of Interest on	406
Sinking Fund accrued, Amount of	405
Securities in which invested	408
Stock Quotations	409
Public Libraries	188
In Provincial Districts	188
Members and Books	188
Public Property, Value of	236
Public Schools	171
Industrial Schools	184
Secondary Schools	178, 184
Technical Schools	173
Public Trust Office (see also Year-book, 1898, p. 454)	233
Number and Value of Estates administered	233
Public Works	17, 410
Expenditure on	412
Public Worship, Places of	186
Accommodation in	187
Denominations	187
In Provincial Districts	188
Purchase, Occupation of Land with Right of	416, 419, 439
Purchase of Native Lands by Government	435
Quartz-mining	348
Quotations, New Zealand Stock	409
Railways	251
Australasian Colonies, Miles of, in	254
Comparison of Traffic, Revenue, and Expenditure for Eleven Years	252
Government, Goods and Live-stock carried	252
Length and Cost	254
Particulars of Revenue from	253
Passengers	252
Profit on Working	253
Revenue and Expenditure	253
Train-miles	252
Traffic in Local Products for Eleven Years	252
In New Zealand, their History and Progress. (See Year-book, 1894, p. 377.)	
Private	253
Cost of Construction, Revenue, and Working Expenses	253
Wellington-Manawatu Railway	253
Rainfall in New Zealand	260
Rape and Turnips, Acres under	339
Cultivation of	478, 479
Rateable Properties in Boroughs	198
In Road Districts	198
Town Districts	198
Rates collected by Local Bodies, Twenty Years	190
Rates of Wages, Average in Provincial Districts in 1900	241–244
Rating on Unimproved Value	199, 457
Interpretation	457

Rating on Unimproved Value—*continued.* Page
Method of preparing Valuation-roll 458
Method of taking Poll 458
Ratepayers may demand Poll to be taken 458
Rating Powers 458
Result of Polls taken by Local Bodies 459
System Optional 457
Religion of the Ancient Maori 530
Repayments of Advances to Settlers 448, 449
Representation, and the General Election of 1899 319
Duties and Functions of Representation Commissions 319
"Electoral Act, 1893" and Amendment Act, 1896 16
Electoral Acts 319
Electoral Divisions of the Colony 319
General Election of 1899, European Representatives 320
Electors on Rolls in each Electoral District 321
Electors on Rolls, and Votes recorded, in Four City Electorates ... 323
Males and Females registered as Electors 320
Population, Census 1896, in each Electoral District 321
Proportion of Electors who voted, 1893, 1896, and 1899... ... 320
Males and Females who voted 321
Persons registered as Electors, 1893, 1896, and 1899 ... 320
Votes recorded for Defeated Candidates 326
Recorded for each Candidate 323
Recorded in each Electoral District 323
General Elections for European Representatives from the Year 1853 ... 328
Maori Members, Election of 326
Proportion of Population who voted 327
Votes recorded 327
Qualifications of Electors, European 16
Maori 16
Representation Commissions 319
Woman's Franchise 16, 320
Residence and Improvements on Crown Lands 439
Revenue and Expenditure 384
From Government Railways 253
From Land-tax and Income-tax 384, 397
Loan Expenditure, 1900–1901 388
Of Boroughs, Counties, Drainage Boards, Harbour Boards, River Boards, Road Boards, and Town Boards 193, 194
Ordinary Revenue 385
Ordinary Revenue Expenditure 387
Territorial Revenue Expenditure 387
Territorial Revenue 385
Rifle Corps, Volunteer 54
River Boards, Revenue of 193
Rivers 8, 12
Road Boards, Revenue, Expenditure, &c. 193
Roll of Members of the House of Representatives 32
Legislative Council 30
Roman Catholic Schools 180, 181
Root-crops 339, 478
Rotorua District 503

Sailors' Home, Auckland 316
Sanatorium, Hanmer 513
Rotorua 503
Te Aroha 509

	Page
Savings-Banks, Post-Office	227
Private	228
Scholarships	183
Schools, Blind	186
Deaf and Dumb	186
Industrial	184
Cost of	184
Inmates, 1898 and 1899	185
Engineering	173
Mines	173
Native	182
Primary or Public	171
Private	180
Roman Catholic	180, 181
Secondary	178
Sunday	186
Technical	173
Scientific and Literary Institutions	188
Seeds, Grass-	340, 483
Selections, Number and Acreage of	262, 263
Septic Diseases, Deaths from	298
"Servants' Registry Offices Act, 1895"	247
Settlement, Discovery and Early	2
Settlements, Land for	422
Acquisition of Land under	422
Annual Rental under	425
Estates offered for Selection during Year 1900-1901	424
Expenditure authorised	434
Government Aid to Settlers	435
Preference given to Landless People	435
Process of Acquisition	434
Special Provisions for Workmen's Homes	435
Transactions of Board for Year 1900-1901	422
Settlers, Advances to	392
Sheep	268, 488
In Australasian Colonies, 1899-1900	268
In Colony, Fifteen Years	269
In Counties	266
In Provincial Districts, April, 1899 and 1900	270
Number and Size of Flocks	133, 269
Numbers in North and Middle Islands, Fifteen Years	269
Sheep-farming	488
Clips, Average Weight of	488
Cost of Management	271
Grass-seed sown per Acre	310
Lambing Returns	271
New Zealand Flock-book	489
Shearing, Price of	271
Shipping	250
Coastwise, Inwards	251
" Outwards	251
Inwards and Outwards, Ten Years	250
Laws	247
Registered Vessels	251
Vessels and Tonnage	250
Shipwrecked Mariners, Depots for	56
"Shops and Shop-assistants Act, 1894"	246
Silver Produced	343
Sinking Fund	406

Page
Sinking Funds—
Amounts paid for interest and 407
Securities of 408
Sitting-days of House of Representatives 31
Legislative Council 29
Slips, Patent 56
Small Centres, Populations of 367
Small Farmers, Prospects of 502
Small Grazing-runs 416-419, 441
Soils, Description of. (See Land Districts.)
Sounds, West Coast 11
Southland Land District—Physical Features; Area, Nature, and Disposition of Lands; Agriculture, Dairy-farming, Sheep-farming; Coal and Gold; Fish, Fruit; Climate; Towns; Crown Lands for Disposal 598
Sown Grasses, Extent of 334, 340
In Counties 332
New Zealand, compared with Australia 341
Speaker of Legislative Council 30
Speakers of the House of Representatives, Successive 24
Legislative Council, Successive 23
Special Settlement Associations 440
Spinsters and Bachelors in New Zealand 285
Spirits, Consumption per Head 106, 160
Springs, The Thermal 503, 509, 512
State Instruction (see Schools) 170
Statistical Synopsis: Progress of Colony ... ... 426 and Broadsheet
Stewart Island 6, 12
Stipendiary Magistrates' Courts, Apprehensions, Convictions, &c. ... 157
Civil Cases 153
Stock in New Zealand, Live- 266, 487
In Australasian Colonies 268
Successive Governors 17
Ministries 22
Premiers 23
Sugar, Consumption of 105
Sunday Schools, Numbers attending 186
Supreme Court, Civil Cases 153
Judges, Past and Present 19
Survey Charges on Unsurveyed Lands 443
Sutherland Waterfall, The 589
Sydney Pageant—Tamahau Mahupuku's Account 527

Tallow exported 134
Taranaki Land District—Physical Features; Soils; Dairying, Grazing, &c.; Mining; Climate; Towns; Roads and Railways; Crown Lands ... 542
Taranaki Provincial District: Progress for Nine Years 427
Tariff, Customs 82-97
Taxation by General Government 397
By Local Bodies 191
Deductions and Exemptions under Land- and Income-tax ... 397, 453
Growth of Amount paid in Income-tax 399
Incidence of Land- and Income-tax 397, 453
Income-tax 398, 454
Land-tax (ordinary) 397, 452
Graduated 397, 456
Per Head in New Zealand, for Eight Years (excluding Maoris) ... 398
In Australasian Colonies 399
Proportion derived from Customs, 1899-1900 400
Rate of, per Head, including Maoris 398

	Page
Taxation by General Government—*continued.*	
Rates of Land-tax	397, 456
Yield of Tax	397, 455
Tea, Consumption of	105
Te Aroha Mineral Springs (see also Year-book, 1896, p. 427)	509
Access to Te Aroha	512
Analysis of Springs	511
Baths and Bath-houses	510
Description of Waters	510
Technical Education	173
Agricultural, Art, Engineering and Technical Science	173
Canterbury Agricultural College	173, 585
Examinations	174
Manual and Technical Instruction, 1899	176
Metallurgy	173
Remarks on	174
School of Engineering and Technical Science	173
Medicine, Otago	594
Mines, Otago	173, 594
Telegraphs—	
Messages transmitted	257
Miles of Line	257
Receipts	257
Telephone Exchanges	257
Temperature and Rainfall	258–261
At different Stations of New Zealand	258–260.
Highest and Lowest in Shade, in New Zealand, the Australian Colonies, and other British Possessions	261
Tenure of Occupied Lands	264
Tenures, the Three, under Land Act	432
Thermal-springs Districts—	
Hanmer	512
Rotorua	503
Te Aroha	509
Timber exported	127, 129
Tobacco, Consumption of	106
Cultivation of	340
Tongariro Mountain	9
Totalisator Permits issued	429
Town Districts. (See Local Bodies.)	
Towns, Principal, and Suburbs	366
Towns, Villages, &c., Populations of	367
Trade—	
Australasian Colonies as Markets for Great Britain, Importance of	152
External, Total Value of	151
In Australasian Colonies	150
Per Head of Population, Fifteen Years	148
With Atlantic and Pacific Ports of United States, Ten Years	150
With Australia	149
With India	150
With United Kingdom	149
Of Australasian Colonies, Value of, per Head	151
Of Australasian Colonies with United Kingdom	152
(See Exports.)	
(See Imports.)	
(See Shipping.)	
"Trade-Union Act, 1878"	247
Transport and Communication	250
Electric Telegraph	257

Transport and Communication—*continued.*
Mail-services 25
Postal and Electric Telegraph 255
Railways 251
Australasian 254
Cost of 254
Number of Miles travelled 252
Private Lines, Length, Cost, and Revenue 253
Revenue and Expenditure for Eleven Years... 253
Traffic for Eleven Years 252
Traffic in Local Products for Eleven Years 252
Treaty of Waitangi 4
Tree-planting 495
Troops for South Africa 430
Trout in New Zealand, Introduction of. (See Year-book, 1894, p. 431.)
Trust Office, Public (see also Year-book, 1898, p. 454) 233
Turnips, Acreage under 339
Cost of growing 339
Seed Sown per Acre 479
Yield per Acre 479
Typhoid Fever, Deaths from 301

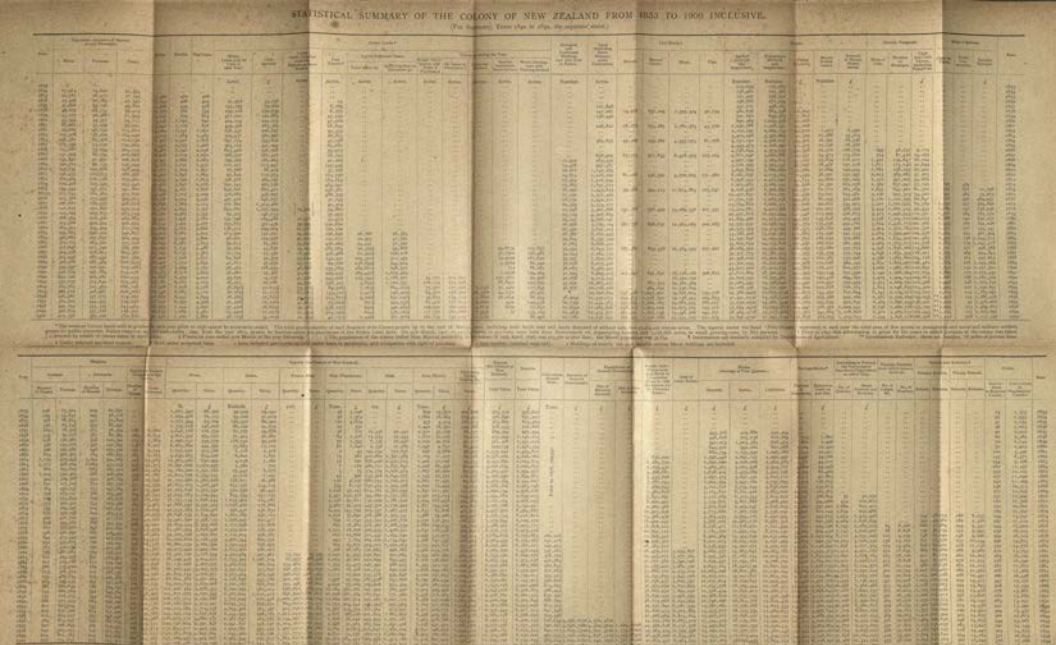
Unimproved Value, Rating on 199, 457
United States, Trade with 150
University of New Zealand 178
Graduates 179
Students 179
Undergraduates 179

Vaccination, Exemptions from 302
Vaccinations, Successful, Numbers and Proportions 302
Valuation of Land, Government 457
Value of Home Produce exported 126
Value of Real Property 198
Vessels. (See Shipping.)
Victoria College 178
Village Settlements... 441
Vine-growing 493
Violent Deaths 314
Vital Statistics 276
Vital Statistics, Australasian Capitals, 1899 294
Volunteers 52
Votes and Voters at General Election 320

"Wages Attachment Act, 1895" 247
Wages in each Provincial District 241-244
Waitangi, Treaty of 4
Water-races, Canterbury 582
Wealth, Private 234
Calculated from Probate Returns 234
Of Australasia 236
Wealth, Public 236
Wellington Land District—Physical Features; Plains, Rivers, Lakes, Scenery, Forests, Soil; Climate; Harbours and Ports; Towns; Crown Lands; Industries, &c. 555
Wellington–Manawatu Railway 253
Wellington Provincial District: Nine Years' Progress 427
Westland Land District — Physical Features, Mountains, Rivers, Forests, Lakes, Soil, Climate, Lands, Harbours, Towns, Mining and Minerals, &c. 574

STATISTICAL SUMMARY OF THE COLONY OF NEW ZEALAND FROM 1853 TO 1900 INCLUSIVE.

(For Summary, Years 1840 to 1852, see separate sheet.)



	Page
Westland, Marlborough, and Nelson Provincial Districts: Nine Years' Progress	428
Wheat, Amount held from Previous Season	335
Acreage and Actual Yield in Provincial Districts...	330
Area under, and Produce, Eleven Years	335
Consumption of, in New Zealand	336
Annual Average, Principal Countries	336
Crops of Australasian Colonies	336
Crops of the World	336
Export in 1900	135
Seed Sown per Acre	477
Whooping-cough, Deaths from	301
Wine, Consumption of, per Head for Eight Years 106,	160
Winter Oats and Cape Barley	486
Yield per Acre	486
Women's Franchise 16,	320
Wool—	
Exported	131
Increase in Production of, Thirteen Years	132
Proportions of Greasy, Scoured, and Washed Wool exported, Three Years	132
Used at Local Mills	132
Woollen Manufactures exported	128
Works, Public 17,	248
World, Wheat-crop of the	336

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